# The KIT — Knowledge & Information Technology No. 112 - 20 January 2014



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## Process and Information Integration in the Oil & Gas Industry

The Object Management Group (OMG), Energistics and the Society of Petroleum Engineers (SPE) -- with the help of c�b� IT & Knowledge Management as a facilitator and coordinator -- are bringing together players in the Upstream O&G industry to better understand how the efficiency and safety of their business processes can be improved through enhanced modeling. We aim to establish a roadmap for the adoption of existing standards, suggest development of new industry standards that will result in such business process improvements, and encourage collaboration with the Standards Leadership Council (SLC), a consortium that coordinates the efforts of several O&G standards organizations, for the benefit of the global upstream industry.

The initial phase of this effort will consist of two workshops:

- the first one in Houston, Texas, February 25-26
- the second one in Utrecht, Netherlands, March 30-31, immediately preceding and collocated with SPE's Intelligent Energy 2014 conference.

Readers interested in this effort should immediately  $\underline{\text{contact us}}$  to obtain more information and secure an invitation to one of these meetings.

### Reminder: Ethics in Computing Webinar

The ACM is hosting an online talk on January 23 at 1:00 p.m. Eastern US time, entitled "Computing Professionalism: Do Good and Avoid Evil... and Why It Is Complicated to Do That in Computing." The speaker will be Don Gotterbarn, Director of the Software Engineering Ethics Research Institute. Register here.

## → Latency/Bandwidth Error Confusion... Again

In a January 8 <u>article in Campus Technology</u> about TARDIS, a new high-performance computing cluster to be shared by Georgia Tech and Emory University, both in Atlanta, the writer says that "the two sites share a 10 gigabit-per-second connection, making latency negligible." We've seen this error so often over the last 20 years that it's not funny anymore.

If I hand-carry a one-terabyte disk drive down the hallway to your office, and it takes me 100 seconds, I've achieved an 80 Gb/s connection, but the latency is still 100 sec. If an earth station beams a signal to the Mars rover, regardless of the bandwidth, the latency is several minutes due to the finite speed of light.

High latency is a "killer" for transmission protocols, such as TCP, that depend on receiving acknowledgement that a packet has been successfully delivered. Low bandwidth hurts if large data sets need to be exchanged, but it's basically a different problem. Billy Hoffman explains it well for non-experts in <a href="this blog">this blog</a> post, and summarizes the issue with this wonderful double entendre: "the size of your pipe doesn't guarantee a satisfying user experience." Okay, so this confusion is still funny after all.

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## MIT Online Course on Big Data

As part of its "Online X" offering of professional online courses, MIT will offer "Tackling the Challenges of Big Data" from March 4 to April 1. The course, a collaboration between MIT's Computer Science and Artificial Intelligence Laboratory (CSAIL) and its School of Engineering, includes 20 hours of video and costs \$495. Students who pass the course assessments will get a professional education certificate from MIT.

## Seen Recently...

"Much of traditional PM seems to be about fear of the unknown. But the unknown doesn't reveal itself just because you throw milestones at it."

-- Ed Seidewitz, "enterprise and software architect, scaled agilist, UML geek" via Twitter (@seidewitz)