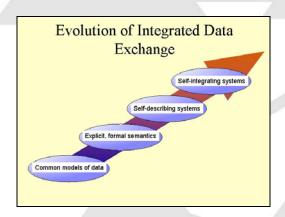
THE SEMANTIC WEB & SELF-INTEGRATING SYSTEMS

In "Weaving the Web," Tim Berners-Lee speaks of a dream for the Web:

"In the first part, the Web becomes a much more powerful means for collaboration dream, collaborations extend to computers... A 'Semantic Web' which should make this possible, has yet to emerge, but when it does, the day-to-day mechanisms of trade, bureaucracy, and our daily lives will be handled by machines talking to machines, leaving humans to provide the inspiration and intuition... The first step is putting data on the Web in a form that machines can naturally understand, or converting it to that form." 1



¹ "Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web," by Tim Berners-Lee, Mark Fischetti (Contributor), Michael L. Dertouzos, Harperbusiness, 2000. "The Manufacturing Engineering Laboratory at NIST can help systems interoperate by developing interface standards, modeling tools, and test methods to capture and exchange the semantics of information."

Dr. Steven R. Ray, Manufacturing Interoperability Program Manager



Manufacturing Interoperability
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2005-03-02



DO YOU...?

Want to totally connect with your enterprise and supply chain?

Need to access and integrate product and process information found on disparate systems?

Feel the cost burden of proprietary solutions ripple through your supporting supply chain?

Love the idea of using standards to integrate your supply chain but keep buying proprietary solutions to save time?

Need to test to ensure products meet their claims but find it expensive to develop and run test beds?

Still let your current contractor dictate your future integration?

WORKING **NOW** TOWARDS INTEGRATED SOLUTIONS FOR THE FUTURE

Globalization is today's reality, and dealing in a productive manner with this reality is trying at best. Hours are lost, deliveries not made, what you receive is not what you need, and your staff are forced to manually transfer data from one system to another. To make matters worse, your technology infrastructure and attempted solutions are evolving faster than ever; the means and time to test your tentative solutions is almost non-existent; and standardized solutions either do not exist or exist and are conflicting.

If, indeed, your ability to manage your information and partners turns out to be the critical determinant of success, then neutral, manufacturing-related standards for the vast amount of data shared among your partners will become of paramount importance.

"NIST is providing the infrastructure and resources to speed development and implementation of new interface specifications." David Connelly, President Open Applications Group

NIST HAS ANSWERS!

The NIST Manufacturing Interoperability Program staff has years of experience developing standards, validating solutions, and providing interoperability results in the field of manufacturing. Building on this experience, we can:

- *Work with industry to develop the specifications necessary for *your* standards-based solutions.
- * Establish validation, conformance, and interoperability testing and demonstration capabilities.
- * Concentrate on collaborative, definitive solutions for high-priority interoperability problems such as supply chain management, distributed design and engineering, production management, and shop floor processes.
- * Develop new semantic- and ontologybased techniques for standards specification, software implementation, and systems integration.

"A new form of Web content that is meaningful to computers will unleash a revolution of new possibilities." Berners-Lee, Hendler and Lassila