

Tuesday Evening Monthly Program – January 13, 2009
5:30 PM Social Half-Hour and Snack.
6:00 - 8:00 PM Talk followed by questions.



Place: Santa Clara University,
Bannan Engineering
Building 404, Second Floor Conference Room 230.

Directions, including Transit information is at
<http://www.incose.org/sfbac/Directions-to-SCU.html>

From the main campus entrance on El Camino Real in Santa Clara, CA, stop at the visitors entrance booth and ask for a "Visitors" parking permit. Say you are here for a meeting and that you are an invited guest of the Dean of Engineering. Park in the parking garage in the visitor's parking spaces or in any other available "Visitors" parking space.

Link to the Bannan Engineering <http://www.scu.edu/map/index.cfm?i=5>

If you have any questions about SCU, you may contact Campus Security at 408-554-4441.

Web Conference Attendance is not available.

Food Donation: FREE for members; \$4 for non-members.

For more information, contact:

Dave Mason, 408-742-0688, (david.mason@incose.org) or

Chin-An Cheng, 650-354-5913, (chinan.cheng@incose.org) or

Danny Hahn, 650-966-2107, (danny.hahn@incose.org) or

Dorothy McKinney, 408-742-8790, (dorothy.mckinney@incose.org).

For information about this mailing list please visit <http://www.incose.org/sfbac/mail.html>

The mission of the International Council on Systems Engineering (INCOSE), a non-profit professional society, is to "foster the definition, and practice of World Class Systems Engineering in industry, academia, and government."

The SF Bay Area Chapter presents thought-provoking monthly programs for its members and their guests. Learn about INCOSE at <http://www.incose.org>.

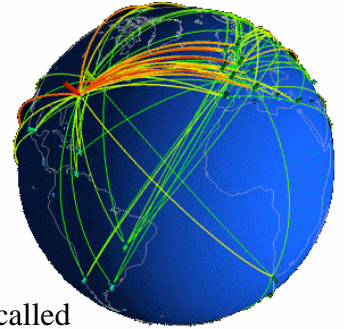


Systems of Systems Engineering: Where's the Beef?

Are "Systems of Systems" something new?

It has been suggested that Systems of Systems are a distinct kind of system having: 1) special characteristics, 2) special engineering processes, and 3) special training needs for Systems of Systems Engineers. If true, these claims suggest that System of Systems Engineering is a new, distinct paradigm within Systems Engineering. But the burden of proof is on the innovators. This 2 hour presentation looks at an overview of the relevant details from a pragmatic standpoint. Special emphasis is given to:

- Architectural Patterns and Processes
- Integration Patterns and Processes
- Collaborative Engineering Processes
- Testing and Evaluation Processes
- Strategies for managing Complexity in Systems of Systems



Why does the Internet work?

The Internet has been called the largest man made system ever built. It has also been called a System of Systems. As an example of a Systems of Systems, several questions will be addressed:

- From an architectural point of view, what's special about the Internet?
- What can we learn from the process by which the Internet was created?
- What's driving the growth of the Internet and how does its architecture facilitate that growth?

You should attend this presentation if you are:

- *Responsible for the design of large systems*
- *Make program decisions in large development projects*
- *Needing sound development processes for systems that are to be fielded in a system of systems context.*

The presentation is aimed at:

- Systems Engineers
- Design Engineers
- Program Managers
- Educators
- Others responsible for developing and managing complex systems

Dr. Scott Workinger has 30 years experience leading organizations that create innovative, practical solutions to business problems and field working systems in a multi-disciplinary context. He has led multi-disciplinary analysis and innovative development efforts in complex, risk-laden environments in the fields of information technology (expert systems, operations analysis, CAD, collaboration technology), manufacturing (automotive, glass, optical fiber), and construction engineering (nuclear, pulp & paper). He currently teaches courses on technical leadership, systems architecture, testing and evaluation, problem analysis and systems engineering. He consults on strategic management and technology issues. The students in his continuing education courses come from a broad cross section of backgrounds and include experienced leaders and technologists from such diverse backgrounds as the US Navy, NASA, pharmaceutical companies, aircraft program management, and systems engineering consulting firms. Scott is a member of INCOSE.



He has a B.S in Engineering Physics from Lehigh University, an M.S. in Systems Engineering from the University of Arizona, and a Ph.D. in Civil and Environment Engineering from Stanford University where he performed research at the Center for Integrated Facility Engineering on integration between engineering processes and design models. Scott has a passion for empowering next generation business processes through research, application, and teaching. His particular forte is the application of diverse interdisciplinary resources to solve extremely challenging practical problems.