

Tutorial Title : MS4 Me – System Entity Structure based DEVS Modeling and Simulation environment

Time : Sunday afternoon

Place : SpringSim 2013

Speaker : Dr. Bernard P. Zeigler, Chief Scientist, MS4 Systems, Inc. and RTSync Corp.

MS4 Me is a new commercial Integrated Development Environment for DEVS, available for download from www.ms4systems.com. It features use of the System Entity Structure (SES) simulation modeling ontology in easy-to-use-form for model development and experimentation management. In this tutorial session, we will present a streamlined modeling and simulation process with MS4 Me environment using a variety of illustrative examples. The two main pillars of DEVS and SES make the new environment a powerful and efficient platform to develop a virtual build and test of complex Systems of Systems.

Topics to be covered:

- DEVS Integrated Development Environments
- Finite Deterministic DEVS
- System Entity Structure (SES)
- Decomposition and Coupling
- Hierarchical Construction.
- DEVS Natural Language Models and Elaborations
- Elaborating FDDEVS into Fully Capable Models in Java
- Specialization and Pruning
- Aspects and Multi-aspects
- Inheritance in Pruning
- Automated and Rule-Based Pruning
- DEVS Simulation Protocol
- Dynamic Structure: Agent Modeling

Through the cloud based model store, it is easy for teachers and students to exchange DEVS models within a course setting and for developers to collaborate across the web. More information can be found from the new book, [Guide to Modeling and Simulation of Systems of Systems](#)”