Call For Papers


Special Issue: Leveraging Modeling & Simulation as a Service for the Future M&S Eco-system

Modeling & Simulation (M&S) is a widely used toolset within the defense community across many application domains. Most often associated with military training, M&S is also used for analysis, experimentation, test and evaluation (e.g., in the acquisition process). M&S products are therefore very valuable and often high-investment assets. Thus it is essential that M&S products, data and processes are conveniently accessible to a large number of users as often as possible. Therefore a new “M&S eco-system” is required where M&S products can be accessed simultaneously and spontaneously by a large number of users for their individual purposes. This environment has to support stand-alone use as well as integration of multiple simulation systems and real systems into a coherent (maybe distributed) simulation environment whenever the need arises.

Following the shift towards cloud-based IT solutions that has already led to significant changes in the non-defense sector, service-based architectures are considered to be very promising also for realizing the next generation of M&S environments and are expected to shape the future defense M&S eco-system. The combination of M&S with service-based architectures and ideas taken from cloud computing is known as “Modeling & Simulation as a Service” (MSaaS).

This special issue looks for theoretic foundations as well as practical applications of service-oriented architectures in context of M&S applications in the defense sector. Reports of existing, fielded applications are encouraged as well as visionary contributions how the future defense M&S eco-system should look like and how this may be achieved (roadmap, required standardization activities, etc.). Potential contributions can include, but are not limited to:

- General frameworks for Modeling & Simulation as a Service (MSaaS)
- Case studies of known MSaaS implementations
- Program Cost / Schedule / Quality impacts leveraging MSaaS
- Use of existing standards (e.g., NIST, ISO) to complement MSaaS
- Training impacts caused by / due to MSaaS
- Implications of leveraging legacy software / hardware in MSaaS design / development
Papers submitted should not be concurrently under review at another conference, journal, or similar venue.

**Instructions for Manuscript Submission**

For manuscript formatting and other guidelines, please visit the Author Guidelines for JDMS page.

**Submissions for Full Paper Review**

Manuscripts should be prepared and submitted online at the SCS Manuscript Management System. Please note in your online cover letter that your submission is intended for the Special Issue: Leveraging Modeling & Simulation as a Service for the Future M&S Eco-system

**Note:** Manuscripts must not have been previously published or be submitted for publication elsewhere. Each submitted manuscript must include title, names, authors' affiliations, postal and e-mail addresses, an extended paper, and a list of keywords. For multiple author submission, please identify the corresponding author.

**Due Dates**

Full papers due 30th March 2016

Expected date of publication Winter 2017

**Final Paper Submissions**

Each final submission must be prepared based on the JDMS journal requirements (see the Author Guidelines for JDMS page).

**Guest Editor**

Dr. Robert Siegfried