XMSF STRATEGIC SYMPOSIUM

Extensible Modeling and Simulation Framework:

Adopting a Web-Centric Approach

George Mason University Fairfax, Virginia 6 September 2002

George Mason University

The MOVES Institute
Naval Postgraduate School

SAIC

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As the Department of Defense (DoD) is engaged in both warfighting and institutional transformation for the new millennium, DoD Modeling & Simulation (M&S) also needs to identify and adopt transformational technologies which provide direct tactical relevance to warfighters.

Because the only software systems that composably scale to worldwide scope utilize the World Wide Web, it is evident that an extensible Web-based framework shows great promise to scale up the capabilities of M&S systems to meet the needs of training, analysis, acquisition, and the operational warfighter.

By embracing commercial web technologies as a shared communications platform and a ubiquitous delivery framework, DoD M&S can fully leverage mainstream practices for enterprise-wide software development. An interdisciplinary team from the Naval Postgraduate School (NPS), SAIC Inc. and George Mason University (GMU) has begun to investigate how the high potential of the new technologies can be brought to bear on the modeling and simulation problems DoD faces today. It is clear that Web-based technologies have the capability to support interoperability of the spectrum of DoD models and simulations including constructive, virtual, and live as well as integrating legacy simulation frameworks and the increasingly important distance-learning technologies.

The next step is to define a consistent framework for integrating the new technologies to meet future challenges in a way that also harmonizes as much as possible with legacy systems. To do this well requires the persective of a broad cross-section of technologists from defense and commercial sectors.

We have begun this process by organizing an invitational workshop that will involve some of the brightest and most experienced technologists from both sectors. The workshop is charged with producing a definitive top-level Extensible Modeling and Simulation Framework for consideration by the defense modeling and simulation community.

The first public presentation of XMSF will occur in a Strategic Opportunities Symposium at GMU Fairfax on 6 September 2002. We are inviting leaders in modeling and simulation technology to join us that day, to review the report produced by the workshop and begin considering how it could be implemented.

The symposium agenda follows. The morning will be devoted to presentations by workshop attendees intended to expose the breadth, depth and variety of technologies brough together by XMSF. The afternoon is intended to obtain feedback from participants, both senior defense representatives and general attendees.

Agenda— XMSF Strategic Opportunities Symposium

0800—Registration Opens. Continental breakfast available (beverages available all day)

0830—Welcome to GMU. Dr Lloyd Griffiths, Dean of College of Information Technology & Engineering, GMU

0835—Keynote: M&S Technologies and the Web. Dr. Anita Jones, Dept of Computer Science, UVA (former director, Defense Research and Engineering)

0900—XMSF Workshop Results. Chair: Dr. Don Brutzman, NPS

- Web Technologies: Dr. Don Brutzman, NPS
- Internet Technologies: Dr. Mark Pullen, GMU
- M&S Technologies: Dr. Katherine Morse, SAIC
- Defense Impact: Dr. Mike Zyda, NPS

1015—break

1030—Technologists' perspectives on XMSF. Chair: Dr. Katherine Morse, SAIC

- Commercial M&S Web Technologies: Rob Glidden, Sun Microsystems
- Commercial M&S Internet Support: (to be presented by attendee from industry)
- ADL and Web-Based M&S: Dr. Philip Dodds, ADL
- DoD's Homeland Defense Role and Web-Based M&S: Walt Zimmers, DTRA

1140—Lunch (on-site)

1245—Warfighter's Perspective on XMSF. Chair: Dr. Dennis McBride, Potomac Institute. Presentations by senior leaders from DoD

- USMC: Dr. Mike Bailey, USMC Combat Development Command
- Also invited: Army, Navy, Air Force speakers

1400—Programmatic Pespective on XMSF. Chair Dr. Mike Zyda, NPS

- Dr. Sue Numrich, DMSO
- Also invited: speakers from AMSO, NAVMSMO, AFAMS

1500—break

1515—Open-Mike Session. Chair: Dr. Mark Pullen, GMU. Ground rules: form a queue; one slide (3 minutes) max per turn

1630—Reception: snacks & cash bar

Please register soon at http://netlab.gmu.edu/ XMSF. Space is limited.

For more information, see MovesInstitute.org/xmsf