Risk Assessment through Automated Attack Analysis

THURSDAY, SEPTEMBER 28, 2017, 8:30AM TO 4:30PM NEW ORLEANS, LA, USA



8:30am	Welcome to the OMG Cybersecurity Workshop Dr. Ben Calloni, Lockheed Martin Fellow Co-chair, OMG Systems Assurance Task Force
8:45am	Cybersecurity Primer for Managers

Dr. Ben Calloni, Lockheed Martin Fellow Co-chair, OMG Systems Assurance Task Force

The need for Cybersecurity across the globe has increased significantly in the past few years. In response to that need, the National Institute Standards and Technology (NIST) in partnership with other U.S. Government agencies created a new series of directives addressing the need to properly secure Information Technology systems. Success of a company's IT department depends on upper level business leaders understanding the need to provide proper funding support to manage Cyber risk of company intellectual property and privacy data. This presentation will provide the audience with a basic understanding of Cybersecurity principles.

10:15am	Morning Refreshment Break
10:30am	The Safe, Secure and Reliable Industrial Internet: A Standards Story

Robert A. Martin, Senior Principal Engineer, MITRE Steering Committee Member, Industrial Internet Consortium

Mr. Robert Martin will discuss the driving concepts behind creating the safe, secure, and reliable Industrial Internet of Things (IIoT) system ecosystem. He will review the role of OMG® and other standards in the IIoT ecosystem and marketplace. He will discuss sourcing, supply chain assurance, and evidence-based value chains and assurance for this emerging global IIoT ecosystem.

11:15am	Model Based Cybersecurity Assessment

Dr. Nikolai Mansourov, CTO, KDM Analytics

Currently, understanding, assessing and managing the risks of systems in cyberspace is a very costly and challenging task that requires the expertise of well-trained and seasoned security professionals, a scarce commodity. Furthermore, risk analysis and risk mitigation of interdependent elements of these systems are too often done in isolation, making these systems vulnerable to multi-stage cyber-attacks, with the potential to wreak havoc in government, industrial, commercial and private domains regionally, nationally and globally. This session will focus on exploring more efficient, formal, systematic and comprehensive way of performing risk analysis.

12:00pm - 1:00pm	Lunch
1:15pm	Federated Threat Analytics and Information Sharing

Cory Casanave, President and CEO, Model Driven Solutions Co-chair, OMG Government Domain Task Force

Our society faces threats and risks from many sources and channels spanning both physical and cyber space. By analyzing, federating, and sharing information across multiple domains (i.e. critical infrastructure, cyber, health and human services, public safety), we can effectively counter and respond to multi-dimensional threats. Mr. Cory Casanave will discuss advances in cross-domain information sharing, Federation and analytics.

1:45pm Cyber Information Sharing and Safeguarding

Mike Abramson, President and CEO, Advanced Systems Management Group (ASMG Ltd.)
Co-chair, OMG C4I Domain Task Force; Chair, IEF Working Group

NIST SP 800-150 describes a process for establishing Cyber Threat Information Sharing capability. This presentation will outline how the OMG Information Exchange Framework (IEF) and supporting standards can be used to architect Cyber Information Exchange Specifications that document and codify rules that can be transformed and automated and administered in the operational environment. This approach seeks to address the risks associated with rapid changes in the threat environment and the high lifecycle costs of traditional interfacing strategies.

2:15pm	Afternoon Refreshment Break
2:30pm	Privacy and Data Residency Considerations

Claude Baudoin, owner, cebe IT and Knowledge Management Steering Committee Member, Cloud Standards Customer Council

As data is increasingly accessed and shared across geographic boundaries, a growing web of conflicting laws and regulations dictate where data can be transferred, stored, and shared, and how it is protected.

The OMG®, in collaboration with the Cloud Standards Customer Council™ (CSCC™) recently completed a significant effort to analyze and document the challenges posed by data residency. Mr. Claude Baudoin will share actionable insights from this work and introduce cloud security guides from the CSCC.

3:00pm

Code Quality Standards and Technical Debt Management

Dr. Bill Curtis, SVP and Chief Scientist, CAST Executive Director, Consortium for IT Software Quality

OMG has approved standards for Automated Function Points, Automated Enhancement Points, and structural quality measures for Reliability, Security, Performance Efficiency, and Maintainability. The structural quality measures are compliant with definitions in the new ISO/IEC 25010 standard for software quality measurement and supplements the ISO 25000 series by providing source code measures. Dr. Bill Curtis will describe these measures and how they can be used in quality assurance practices, technical debt measurement, and vendor contracts.

3:30pm

Panel Discussion: Economics of Cybersecurity: Cost vs. Protection

The penalties for getting cybersecurity wrong are steep. The Economist reports that the average time between an attacker breaching a network and its owner noticing the intrusion is 205 days. Globally, cyber-attacks cost over \$575 billion per year. At the same time, all sorts of companies offer high-priced cybersecurity solutions/services, from small, specialist outfits to giant arms companies. How do we choose the right solution and balance it with budget?

Lead: Djenana Campara, CEO, KDM Analytics; Co-chair, OMG Systems Assurance Task Force

- Ron Townsen, Senior Lead Engineer, General Dynamics; Co-chair, OMG C4I Domain Task Force
- Dr. Bill Curtis, SVP and Chief Scientist, CAST; Executive Director, Consortium for IT Software Quality (CISQ)
- Dr. Ben Calloni, Lockheed Martin Fellow; Co-chair, OMG Systems Assurance Task Force

4:30pm

Close

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http://www.omg.org/cybersecurity-workshop/