Software Assurance Consortium

Providing a Voice for Software Assurance

“articulating consumer-driven assurance needs”

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Software Assurance Consortium

Bringing together Software Consumers, Industry, Academics, and Government to Transform the Security and Dependability of Software

Improve the overall software assurance:

• Provide a voice to articulate consumer needs
• Encourage adoption of standards, methods, metrics, tools, and other means for mitigating risks by software providers
• Identify successful “best practices”, methodologies, and techniques
• Share experiences in choosing, developing, and implementing good code
• Encourage development and sharing of “standards for testing labs”
• Leverage other orgs to develop and deliver procedures and metrics
• Define, prioritize and sponsor a SWA research agenda on the hard problems
• Apply standard measures of quality to address worldwide supply chain risk management
Why Software Assurance is Critical

• Software is the core constituent of modern products and services – it enables functionality and business operations

• Dramatic increase in mission risk due to increasing:
  – Software dependence and system interdependence (weakest link syndrome)
  – Software size & complexity (obscures intent and precludes exhaustive test)
  – Outsourcing and use of un-vetted software supply chain (COTS & custom)
  – Attack sophistication (easy exploitation)
  – Reuse (unintended consequences increases number of vulnerable targets)
  – Number of vulnerabilities & incidents with threats targeting software
  – Risk of asymmetric attack and threats

• Increasing awareness and concern
SwAC Value Proposition:

- Be a voice for the consumer
- Strong voice to request special security features for small users
- Empower consumers to influence standards to improve SwA
- Provide a forum to share sensitive information
- Ability to report silently about what you don’t want to say publicly
- Identify tools and testing labs: benchmark capabilities and features
- Provide special tools (propriety and sensitive) for the SwAC community
- Characterize the risk so you understand the potential impact
- Organizing formal and informal training for SwA
- Influence and improve SwA throughout the supply chain
- Satisfy Sarbanes Oxley for reasonable due diligence
- Develop a benchmark insurance, premium reduction considerations
- Software Facts Label (NIST)
SwAC empowers software consumers to understand and reduce risk exposure attributable to software across the software supply chain.
Role of the SwA Consortium

Consumers
Goal: Understand risk exposure posed by software

Known Vulnerabilities

Software Producers & Vendors

SwA Consortium

Integrators

Quantified Software Assurance Assessment

Test Tool Vendors

Test Labs

Standards
OMG
ISO
IEEE

GIGLite.org

R&D
Membership Categories

• Software end users
  – Commercial users
  – Integrators
  – Government users
  – Individuals

• Academic and research institutions
• Developers
• Liaison organizations
• Sponsors
Meeting the New Challenges of Software Assurance

The purpose of the SwAC is to formalize our community of interest with the objective of developing, deriving and proliferating means for identifying and quantifying risks to organizations posed by vulnerabilities and weaknesses in software, and the means by which risk can be reduced, and trustworthiness can be increased across the software supply chain.

As government and industry become more dependent on information technology, increased scrutiny is needed of their supply chains to reduce risk exposures being passed to users of software and software-intensive systems.

Many are asking: “How do we make sure software is trustworthy and resilient to today’s cyber threats?”

The SwAC will bring together representatives of organizations (including government agencies, other software end-users, and vendors) that have increased risk exposure attributable to exploitable software that they acquire from others.

http://SwACConsortium.org
The Software Assurance Consortium supports a number of public/private initiatives related to software assurance. This includes providing a hosting venue to disseminate information to consumers or sponsoring research initiatives important to the consumer. Initial discussions with a number of organizations have resulted in the potential projects.

**Software Assurance Consortium Supported Projects**

- Software Landscape Wiki
- Software Facts
- Software Assurance Tool Evaluation
- Software Acquisition Guides
- Software Assurance Tutorials
- Software Assurance Pocket Guides
Next Steps in the Partnership

- Identify New projects
- Populate the Software Landscape Portal
- Volunteers
  - Working groups
  - Web activities
- Sharing of Useful Content
- Engage End Users
- SwA Awareness
- Outreach
- Membership
Questions?

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