OMG Software Assurance Workshop

Key Note Address
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Reliable High Assurance Software that is Secure when appropriate is essential.

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- Many people have concerns about Security;
- Particularly regarding ICT Security;
- Concerns may be exagerated, but .....

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- Concerns may be driven by:
  - Privacy concerns,
    - E.g. e-Commerce,
  - Reliability concerns,
    - E.g. Process control [SCADA],
  - Confidentiality concerns,
    - E.g. National Security,
  - Many, many others.

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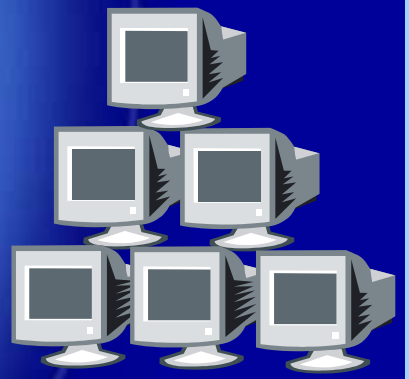
- Software is ubiquitous in ICT, be it:
  - Embedded,
  - Middleware,
  - Application.
- It is critical to many/most Security mechanisms.



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- Beyond Security, Software is essential to the functioning of ICT;
- In terms of:
  - Applications, and
  - The platform for the applications to run on.

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- Societies confidence and trust in ICT & software is poor;
- Users confidence and trust in ICT and Web based features is also low.

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- This lack of trust is due to:
  - Software failures
  - Security incidents,
  - Malware,
  - Media reports;
- Even reliable software is "Tarred with the same brush".

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- So how can this problem be dealt with?
- If the community does not find a solution we will be faced with Regulation and Legislation.

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- The solution is **"High Assurance Reliable Secure Software"**;
- This is well known.

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- How does “High Assurance Reliable Secure Software” solve the problem?

- Reducing failures over time;
- Demonstrate reliability;
- With Assurance arguments that show why the software can be trusted:
- By producing it ALL THE TIME.

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- Other issues:

- Legacy systems:
  - They are still a problem,
  - They can not be permitted to undermine the “New Software”,
  - The excuse theat the legacy system undermined the new Reliable, Secure High Assurance Software “won’t cut it”.

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- Other Nations are already moving to address this situation:
  - Developing National Strategies,
  - Making consistent & coordinated efforts,
  - Initiating multi year programs.
- The backlog of mistrust MUST be overcome:
  - **"Trust me" and "Flim Flam" will not work**.

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- The Challenge:
  - Produce Reliable High Assurance Secure Software UNIVERSALLY,
  - Develop believable, easily understood Assurance Arguments and Claims,
  - Solve the Legacy System conundrum;
- This can be done,
  - But requires effort.

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- Some possible help:

- Assurance:
  - ISO/IEC 21827 SSE-CMM,
  - ISO/IEC 15443 A Framework for IT security assurnace(3 Parts),
  - ISO/IEC 15408-3 Evaluation criteria for IT security -Part 3 Security assurance requirements.

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Thank You.