Cyber Division – Manufacturing Division
Joint Working Group

Cyber Security for Advanced Manufacturing
Developing an NDIA White Paper

20 June 2013 Status Report

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Adversaries target IP as a shortcut to attaining some manner of strategic, financial, technological, or related advantage.

Manufacturing was the Most-targeted Sector in 2012

Semantic Internet Security Report 2013

When it comes to IP theft, the targeted nature of the attacks considerably changes how they are conceived and carried out.

Verizon Data Breach Investigations Report 2012
Objective – NDIA White Paper
- Raise awareness of the needs, known solutions and best practices, and gaps in cybersecurity for manufacturing.
- Recommend government and industry actions to implement best practices and fill gaps.

Scope
- Protection of the “digital thread” of technical data -- product and process information -- that drives design, manufacturing and product support operations
- Examine from both supply chain and industrial control systems perspectives, with special emphasis on additive manufacturing
- Highlight areas where manufacturing differs from other IT security needs
Study Charter
(2 of 2)

- **Study Tasks**
  - Interview key stakeholders in government, industry and academia to obtain a broad range of views on needs, solutions, best practices, and gaps
  - Review published standards and guides to assess relevance to manufacturing enterprise applications
  - Develop recommendations for actions to improve implementation of known solutions and best practices and to fill gaps
  - Draft a report by **October 2013** to be coordinated and issued jointly by the NDIA Cyber Division and Manufacturing Division
Working Group on Cybersecurity for Manufacturing

Manufacturing Division Members
Michael McGrath (Co-chair)
Jason Gorey
Rob Gorham
Kris Hill
Mike Lemon
Dan Maas
Dennis Miller
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Richard Neal
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### Schedule

**Completed:**

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
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<tbody>
<tr>
<td>Feb</td>
<td>Working Group Formed</td>
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<tr>
<td>Mar</td>
<td>Mtg 1 – Scoping Workshop</td>
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| Apr   | Mtg 2 – DoD CIO (Don Davidson)  
Draft NDIA letter and read-ahead for interviews |
| May   | Mtg 3 – Additive Manufacturing (Dan Maas) |

**Planned:**

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<th>Event</th>
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| July - Sep | Interview key stakeholders,  
Monthly working group meetings |
| Sep - Oct | Draft White Paper |
Interview Candidates

- **Goals**
  - Data and informed opinions regarding protection of the “digital thread” of technical data that drives and enables design, manufacturing and life cycle support
  - Leads that help identify needs, best practices, gaps

- **Diversity of Viewpoints Sought**
  - Industry, government, academia viewpoints
  - IT vs. Engineering/Manufacturing Operations viewpoints
  - Manufacturers, Security Solution Providers viewpoints
  - Supply chain, industrial control systems, machine-level (e.g. additive manufacturing) viewpoints
  - Executive level perspectives, deep technical expert perspectives
Initial Candidates

- Richard Hale, CISO, DoD CIO Office
- Pat Gallagher, NIST Director, (National Cybersecurity Framework)
- Elana Broitman, PDASD(M&IBP)
- Lee Holcomb, VP for Cyber Initiatives, Lockheed Martin
- Jim Motes, VP and CISO, Rockwell Automation
- Jim Williams, Managing Director, Paramount 3D Systems Company

We plan to send NDIA letter and schedule interviews in July
What We Need

- Additional active working group participants
  - Pool of people available to conduct formal interviews scheduled by NDIA
  - Volunteers to conduct informal interviews with contacts whom we know
  - Volunteers to help with literature review

- Additional candidates to be interviewed (formally/informally)

Please email michael.mcgrath@anser.org
Questions?