

Cyber Supply Chain Risk Management (C-SCRM): The Intersection of Cybersecurity, Supply Chain Management & Acquisition

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# **Agenda Topics**

## **The Challenges**

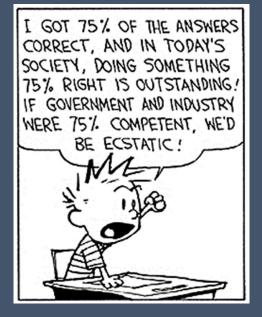
- C-SCRM Risks & Threats: Not Just a Cyber Issue
- Dynamic Regulatory Landscape

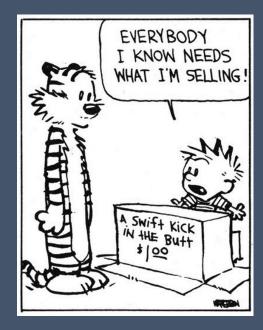
## **Enabling Solutions**

- Effective Integration in Technology Procurement
- Supply Chain Risk Illumination Professional Tools & Services (SCRIPTS)



## **Relational Humor for the Day**





## C-SCRM Risks and Threats

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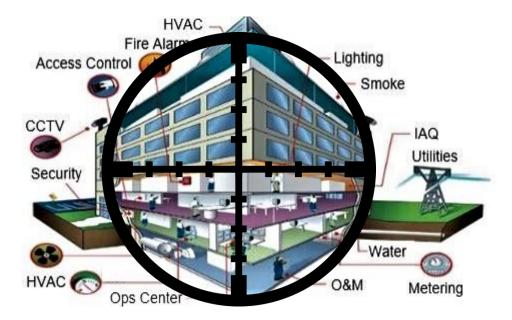
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# **Critical Infrastructure in the Crosshairs**

- GAO Report 21-171, Federal Agencies Need to Take Urgent Action to Manage Supply Chain Risks
  - $\circ~$  14 / 23 agencies no SCRM practices
- <u>House Select Committee on Strategic</u> <u>Competition Between U.S. and Chinese</u> <u>Communist Party</u> (Feb 2024)
  - Volt Typhoon





### Information and Operational Technology (IT/OT)



Business function using hardware, software, communications or other facilities used to input, store, process, transmit, and output data in any form.



Mission centered on the business, operations and enterprise information systems. Traditionally used in enterprise networks.



C-SCRM priorities have strong focus on confidentiality with emphasis on integrity and availability.

e.g., Information and Communications Technology (ICT)

Business function using hardware and software in real time to monitor, automate changes, and control various devices, processes and events in a enterprise.



Mission centered on automation of machines, processes, and systems within a plant. Traditionally used to isolate point-to-point networks.



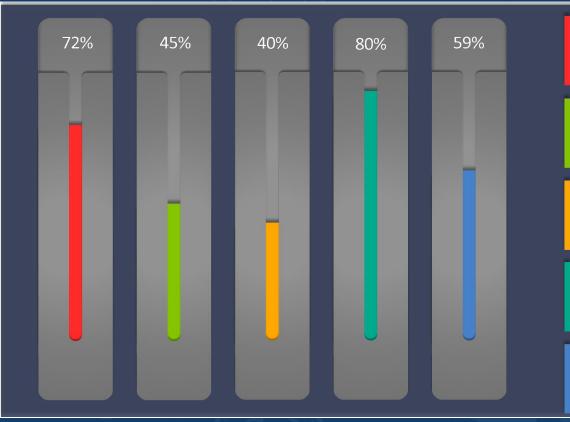
C-SCRM priorities have strong focus on availability with emphasis on integrity and confidentiality.

e.g., Industrial Control System (ICS)

Once considered separate business domains employing their own unique protection systems, OT/IT functions have begun to converge because of shared cyber supply chain risks.

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**72%** - of companies do not have full visibility into their supply chains

**45%** - of all cyber breaches were attributed to past partners

**40%** - of attack campaigns target manufacturing and service sectors

**80%** - of all information breaches originate in the supply chain

**59%** - of companies do not have a process for assessing cybersecurity of third-party providers with which they share data or networks



## **Intersection of Multiple Disciplines**

### Cybersecurity

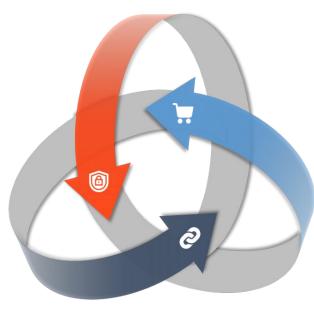
The process of protecting information by preventing, detecting, and responding to attacks.

### **Supply Chain Risk Management**

The process of taking strategic steps to identify, assess, and mitigate the risk in an organization's end-to-end supply chain.

#### **Acquisitions**

The process of acquiring products or services.



#### How they work together

Preventing compromised components from entering the network will improve cybersecurity and can also increase reliability.

### **Complexities**

Three highly complex, evolving functions that business executives are giving more attention to as the risks facing the supply chain become increasingly prevalent.

#### How did we get here

Once considered separate business domains employing their own unique protection processes, these three functions have begun to converge because of shared risks.

# Dynamic Regulatory Landscape

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Executive Orders	OMB Memos	FAR	Agency	FAS Policy	Operationalize
Executive Order on America's Supply Chains	M-22-18 Enhancing the Security of the Software Supply	- FASC Exclusion Orders - Cyber Threat &	Acquisition Workforce Guidance	- OIG Audit, Prohibited Items	Commercial Supply Chain Illumination Tools
Executive Order on Improving the	Chain through Secure Software Development	- Cyber Threat & Incident Reporting - Cyber Reqs for Fed Info Systems	eporting - Implementation of as for Fed FASCSA Orders ns oftware MV-23-02 - luctor Ensuring Only Approved Software is Acquired and orizon Used at GSA cq Supply urity Act GSAM - Identify, assess, respond,	<ul> <li>Information Sharing w/FASC</li> <li>FAS Acquisition Oversight</li> <li>Addressing Contract Compliance</li> </ul>	Supply Chain Risk Information Memorandums
Nation's Cybersecurity	Practices	- Secure Software - Semiconductor			Vendor Risk Assessmen Reports
Executive Order on Initiative to	nitiative to Security of the Over the Ho	Over the Horizon			SOP on Prohibited Items
Bolster Cybersecurity of U.S. Ports	Software Supply Chain	-Federal Acq Supply Chain Security Act - Drones		- C-SCRM Pre-award	SCRM Review Board
	CISA Common Form for Software Attestation &	- Ownership Control & Influence			SOP on Suppression
	Artifact Repository	12 C-SCRM FAR Cases			



# **Key Takeaways for Regulatory Deluge**

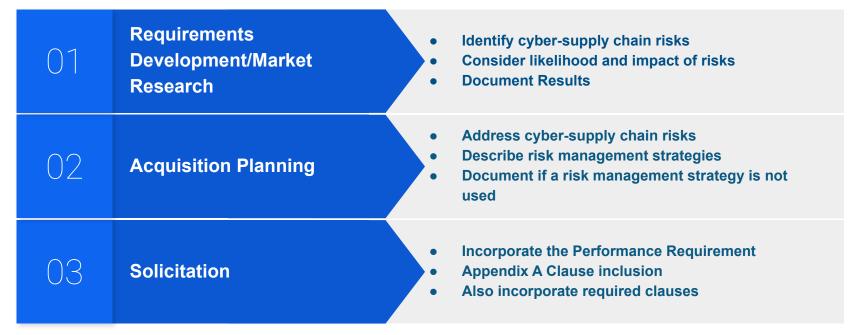
- 1) Impact to Vendors
  - Cost & Increasing Liability
  - Calculus for remaining in Government market
  - Flow downs to subcontractors, third party
- 2) Impact to Workforce
  - Guidance & Training
  - Vendor engagement
  - Information Sharing Internally
- 3) Impact to Systems
  - Modifications
  - Records
- 4) Interagency & Intra agency Dependencies

# Effective Integration in Technology Procurement

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# **Operationalizing C-SCRM in ITC**





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# **Operationalizing C-SCRM in ITC**

#### Cyber risk evaluation

- Questionnaire evaluation
  - Evaluate based on responses to minimum required questions for product, service, or product/service offering
  - Potential consultation, review training with offerors
  - Optional risk based

#### **C-SCRM Plan evaluation**

- Evaluate based on minimum required controls for product, service, or product /service offering
- Annual update submission of C-SCRM Plan and questionnaire
- Potential consultation, review & training with offerors

#### **Compliance Risks evaluation**

 Use VRA or automated tool to ensure no concerns with Section 889, FCC prohibited entities, FASC Exclusion or Removal order

Solicitation, Evaluation, & Award Phase (Pre-award/Pre-performance) Support



## **Approaches for Applying C-SCRM**

#### Agencies have multiple ways to build C-SCRM throughout the Acquisition Cycle

DIY	Partner
Build specific processes and approaches tailored to their agency	Agencies can look for partnership opportunities across the government that help simplify the C-SCRM process

#### For any path an agency chooses, GSA has resources to support them on their journey

DIY	Partner
GSA offers Playbooks and Resources developed by Subject Matter Experts	GSA offers acquisition vehicles with built in C-SCRM requirements
Zero Trust Architecture handbook, C-SCRM tool guidebook	2GIT IT solutions BPA, Highly Adaptive Cybersecurity Services SIN, and SCRIPTS BPA (future)

# Supply Chain Risk Illumination Professional Tools & Services (SCRIPTS) BPA

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## **Description of Need**



The Office of the Under Secretary of Defense (OUSD), Acquisition and Sustainment (A&S) has a acquisition requirement for a cloud and/or web-based data analytics tool(s) that will perform risk analysis, risk identification, reporting, and continuous monitoring of the supply chain.

The supply chain risk illumination tool(s) will help mitigate the risk of high vulnerability to fraud, abuse, and adversarial exploitation of the supply chain for the DoD and other federal agencies that have shared mission areas with DoD.

Enables foundational support of the 2018 Federal Acquisition Supply Chain Security Act and the Federal Acquisition Security Council (FASC)







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## **MOU Requiring Agency**



## **Requirements - FY22 OUSD SCRM Project**



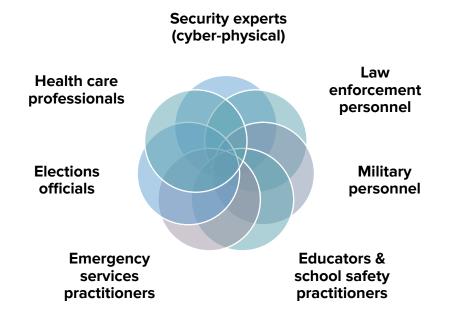
#### • OUSD A-S SCRM FY22 Project End State Outcomes

- Develop supply chain ecosystem and SCRM framework
- Leverage best practices, pilots, or other efforts already in process
- Establish DoD SCRM organizational structure, governance & oversight
- Enable efficiencies, cross-organization collaboration, and consistent data analysis
- Strategic Gap: Resource and maintain enterprise level supply chain ecosystem maps, supplier insight, risk scores, and continuous monitoring to identify systemic risks
- Strategic Goal: Create a platform to achieve full spectrum supply chain risk evaluation with common visibility across DoD
- Operational Lines of Effort: Acquisition Supply Chain Security, Supply Chain Sustainment, Technology Protection, and Cyber & ICT

# Additional Facilities Collaboration Opportunity

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## **Government Facilities Sector (GFS)**



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The GFS's ultimate goal is to collaborate, coordinate and share information with government stakeholders to help establish and continually enhance the security and resilience posture for government entities—a posture that ensures the safety, security, and protection of employees and visitors to government facilities as well as the facilities assets. systems and resources necessary for delivering mission-oriented services.

Interested in receiving GFS updates? Government staff may email <u>gfs@gsa.gov</u> for consideration.



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# **THANK YOU**



For more information, visit: gsa.gov/itc

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