



Resources to Help SMEs Manage Cybersecurity Risks When Doing Business in the Transatlantic Marketplace

June 26, 2024







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- Small Business Cybersecurity Corner
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- Supply Chain Risk Management Quick Start Guide
- Overview of NIST Manufacturing Extension Partnership (MEP) ExporTech Program
- Audience Q&A

Opening Remarks



David De Falco

Deputy Assistant Secretary for Europe and Eurasia. Global Markets, International Trade Administration, United States Department of Commerce

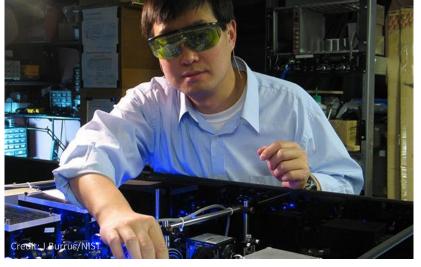
This webinar supports the efforts of the U.S.-EU Trade and Technology Council (TTC) Working Group 9 to improve SME access to and use of digital tools. For more information about the TTC, please visit: <u>https://www.trade.gov/useuttc</u>





To promote U.S. innovation and industrial competitiveness by advancing **measurement science, standards, and technology** in ways that enhance economic security and improve our quality of life

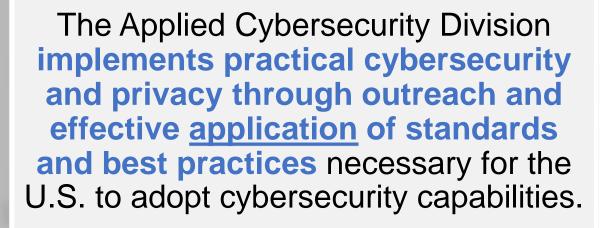






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Celebrating 50+ Years of Cybersecurity





https://www.nist.gov/itl/applied-cybersecurity

NIST International Engagement on Cybersecurity and Privacy Standards



International Engagement at NIST



- The cross-border nature of our economies makes it critical that NIST considers the global context when it conducts research, determines priorities, and conceptualizes approaches.
- As a result of widespread international use, there are now multiple translations and adaptations of NIST cybersecurity and privacy resources.
- NIST encourages international participation at all stages in the development and evolution of its cybersecurity and privacy programs and resources.

Learn About Our Global Impact: <u>https://www.nist.gov/cybersecurity/international-cybersecurity-and-privacy-resources</u>

International Engagement on Resources



- The CSF and other NIST cybersecurity and privacy resources have benefitted from international expertise and are rooted in international standards.
- The CSF is currently used by government and industry in several countries and regions. Version 1.1 is translated into thirteen languages and Version 2.0 is currently translated into two languages.
- International engagement remains a focus for CSF 2.0.
- Work with interagency partners, including the State Department and International Trade Administration (ITA), to share information on NIST cybersecurity and privacy resources to international government partners.
- Work closely with industry on international engagements, including meetings, webinars, and side events during large international conferences.

Translations and adaptations of NIST resources are highlighted on the NIST International Cybersecurity and Privacy Resource Site:

https://www.nist.gov/cybersecurity/international-cybersecurity-and-privacy-resources

Standards Activities in ISO





- NIST has contributed to the following documents in ISO that leverage the CSF:
 - ISO Technical Specification 27110, "Cybersecurity Framework Guidelines," which specifies guidance for developing a cybersecurity framework that aligns with the functions of the CSF
 - ISO Technical Reference 27103, "Cybersecurity and ISO and IEC Standards," which provides guidance on how to leverage existing ISO standards in a cybersecurity framework and maps to the CSF
- NIST is currently contributing as an editor on ISO 27028, a proposed international standard for guidance for attributes for the recently revised ISO 27002 standard

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NIST Small Business Cybersecurity Resources



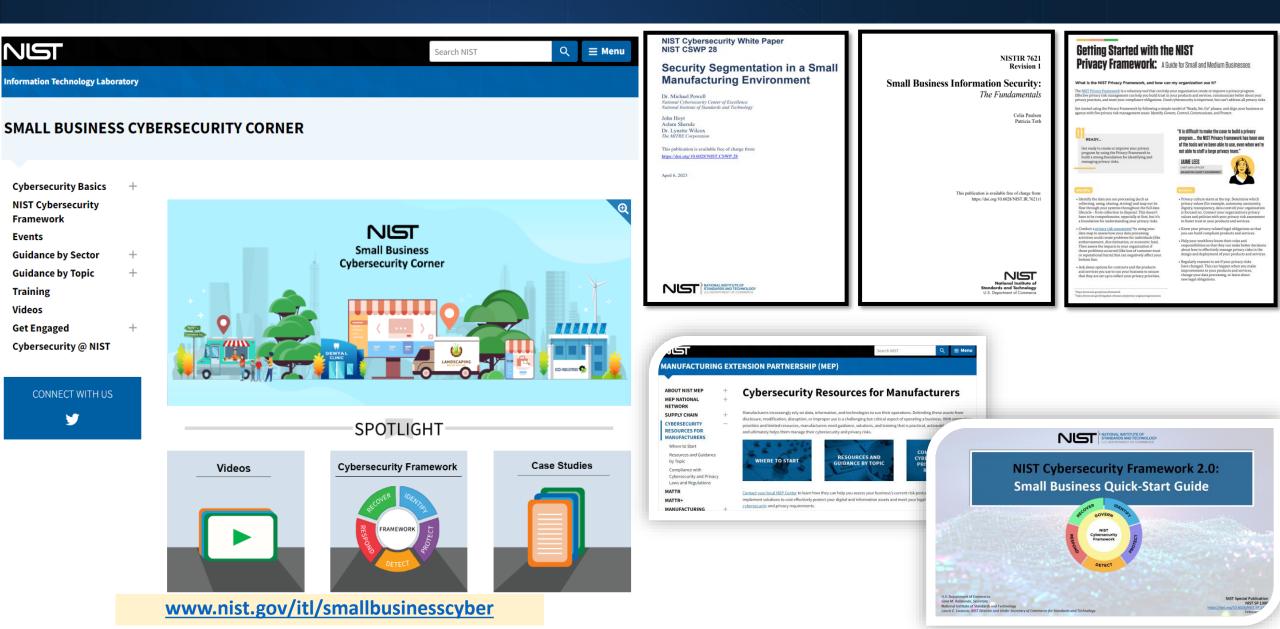
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www.nist.gov/itl/smallbusinesscyber

NIST Small Business Cybersecurity Resources





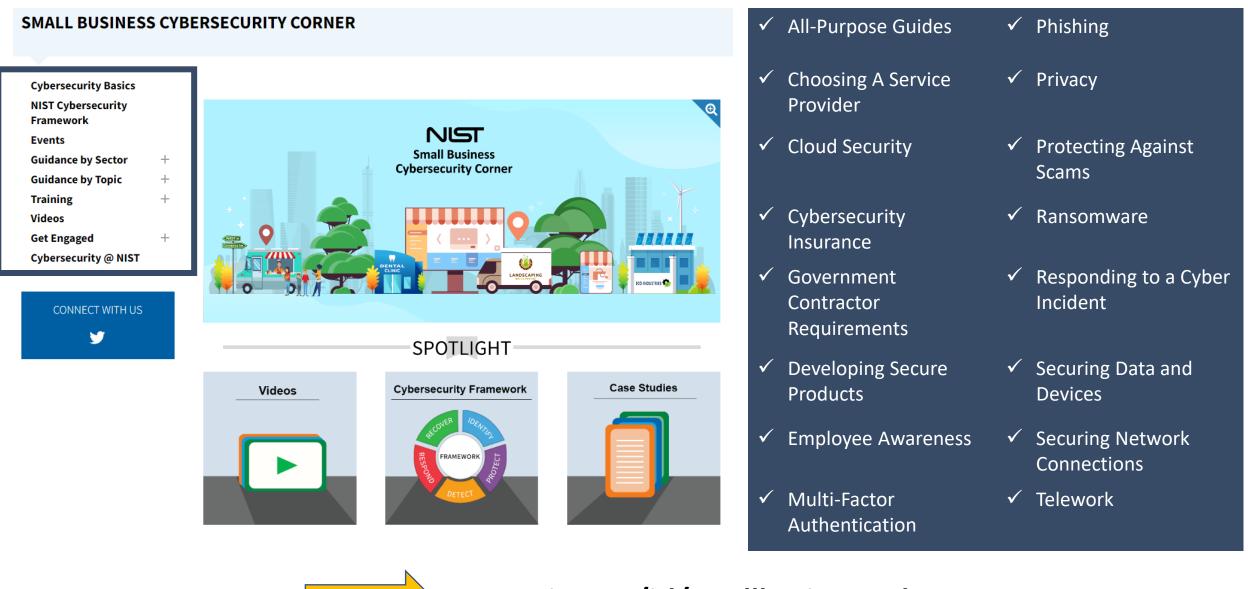


NIST Small Business Cybersecurity Corner

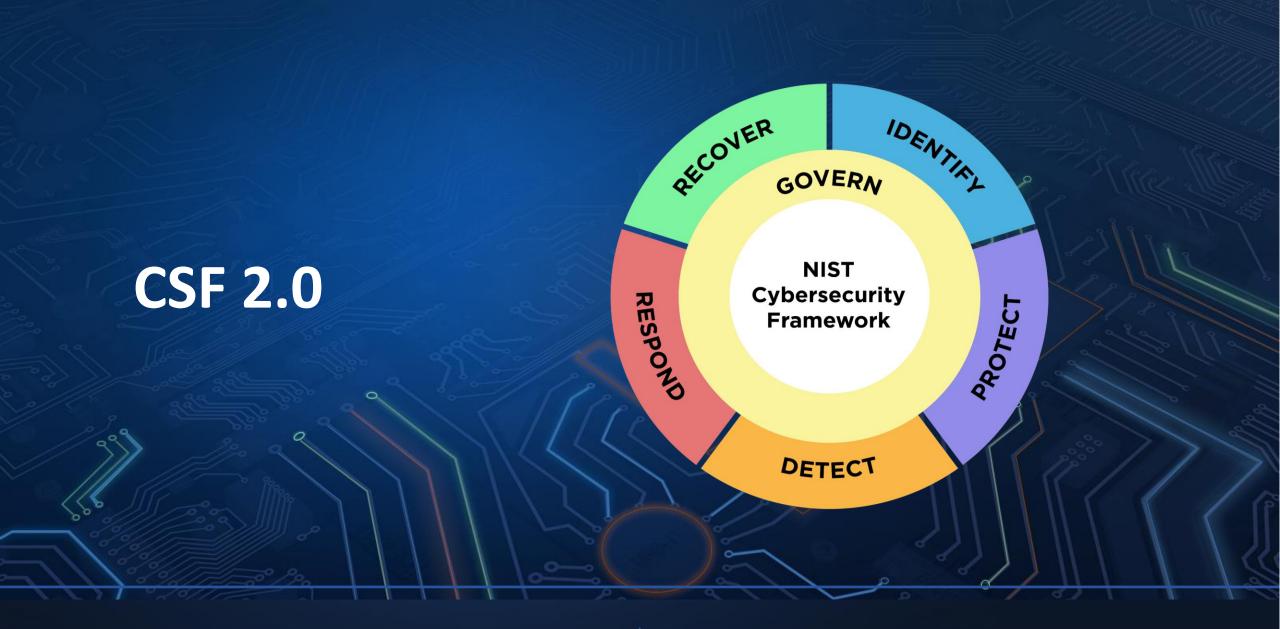
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Guidance by Topic





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https://www.nist.gov/cyberframework

NIST Cybersecurity Framework





Voluntary guidance that helps organizations—regardless of size, sector, or maturity— better **understand**, **assess**, **prioritize**, and **communicate** their cybersecurity efforts.

*not a one-size-fits-all approach to managing cybersecurity risks.

CSF Core

The nucleus of the CSF. A taxonomy of high-level cybersecurity outcomes that can help any organization manage its cybersecurity risks.

Functions>Categories>Subcategories

CSF Organizational Profiles

A mechanism for describing an organization's **current and/or target cybersecurity posture** in terms of the CSF Core's outcomes.

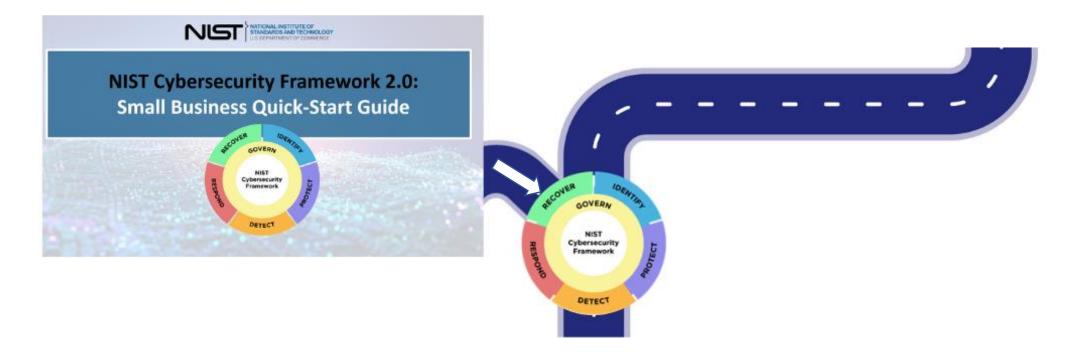
CSF Tiers

Characterize the **rigor** of an organization's cybersecurity risk governance and management practices. Tiers can also provide **context** for how an organization views cybersecurity risks and the processes in place to manage those risks.

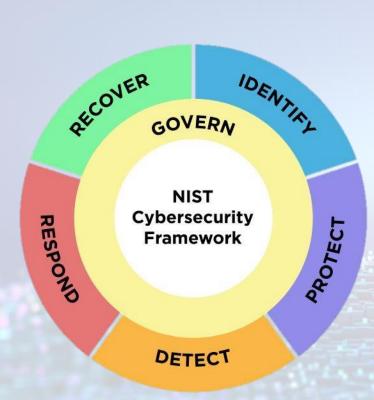
https://www.nist.gov/cyberframework



NIST CSF 2.0 Small Business Quick Start Guide as an On-Ramp to the CSF 2.0 Journey



View full CSF 2.0 SMB QSG: <u>https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1300.pdf</u>



Understand

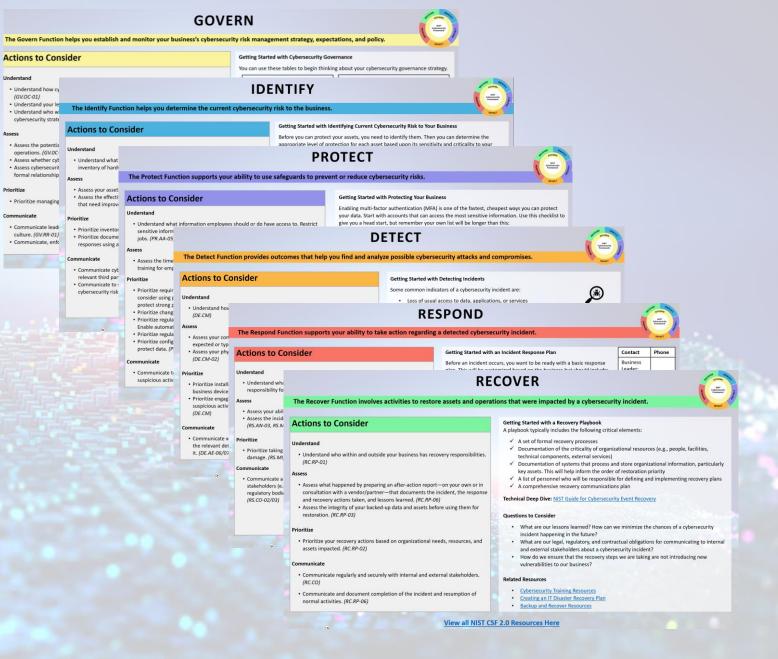
(GV.OC-01) Understand your

· Understand who w cybersecurity strate

Assess the potentia

Communicate, enfo

Together, these 6 Functions provide a comprehensive view for managing cybersecurity risk.



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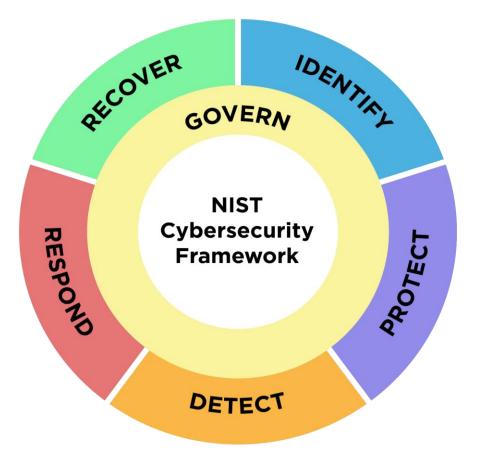
The Govern Function helps you establish and monitor your business's cybersecurity risk management strategy, expectations, and policy.

Actions to Consider		Getting Started with		
	 GOVERN (GV): The organization's cybersecurity risk management is policy are established, communicated, and monitored Organizational Context (GV.OC): The circumstances — mission dependencies, and legal, regulatory, and contractual requirem organization's cybersecurity risk management decisions are un GV.OC-01: The organizational mission is understood and in management total or partial loss of critical business assets and 	, stakeholder expectations, ents — surrounding the derstood forms cybersecurity risk achieving this miss Technical Deep Dive:	nal Context n risks n ion? Staging Cybersecuri	g about your cybersecurity governance strategy. Documenting Cybersecurity Requirements List your legal requirements: List your regulatory requirements: List your contractual requirements:
 operations. (GV.0C-04) Assess whether cybersecurity insurance is appropriate for your business. (GV.RM-04) Assess cybersecurity risks posed by suppliers and other third parties before entering into formal relationships. (GV.SC-06) Prioritize Prioritize managing cybersecurity risks alongside other business risks. (GV.RM-03) Communicate Communicate leadership's support of a risk-aware, ethical, and continually improving culture. (GV.RR-01) Communicate, enforce, and maintain policies for managing cybersecurity risks. (GV.PO-01) 		Governance Oversight Questions to Consider • As our business grows, how often are we reviewing our cybersecurity strategy? • Do we need to upskill our existing staff, hire talent, or engage an external partner to help us establish and manage our cybersecurity plan? • Do we have acceptable use policies in place for business and for employee-owned devices accessing business resources? Have employees been educated on these policies? Related Resources • Securing Small and Medium-Sized Supply Chains Resource Handbook • Choosing A Vendor/Service Provider		

A Few Notes on the Govern Function

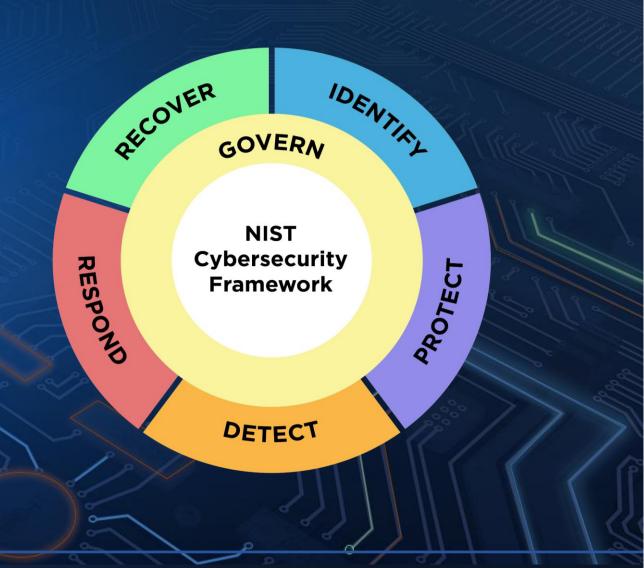
• The Big Picture

- Provides outcomes to inform what an organization may do to achieve and prioritize the outcomes of the other five Functions.
- Encompasses how organizations make and carry out informed decisions on cybersecurity strategy.
- Emphasizes that cybersecurity is a major source of enterprise risk that business leaders should consider alongside other business risks.
- Emphasis on supply chain risk management.



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CSF 2.0 Cybersecurity Supply Chain risk Management (C-SCRM) Quick Start Guide



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https://www.nist.gov/quick-start-guides



GOVERA

NIST Cybersecurity Framework

DETECT

NIST CSF 2.0: CYBERSECURITY SUPPLY CHAIN RISK MANAGEMENT (C-SCRM)

HOW TO USE THE CSF TO ESTABLISH AND OPERATE A C-SCRM CAPABILITY

Establishing a C-SCRM Capability

The CSF has a Category within its Govern Function dedicated to C-SCRM: the Cybersecurity Supply Chain Risk Management (GV.SC) Category. GV.SC contains the key outcomes that every organization should achieve through its C-SCRM capability. Additionally, many of the subcategories within the remainder of the CSF can be used to identify and communicate C-SCRM-related requirements internally for organizations and for their vendors.

Perform these activities to establish your organization's C-SCRM capability:

Activity 1: Create a C-SCRM strategy, objectives, policies, and processes. [GV.SC-01]

Activity 2: Identify your organization's technology suppliers and determine how critical each one is to your organization. [GV.SC-04]

Activity 3: Establish C-SCRM roles and requirements and communicate them within and outside your organization. This includes identifying C-SCRM roles and responsibilities [GV.SC-02] and C-SCRM requirements [GV.SC-05].

It is also important to coordinate and harmonize activities between your C-SCRM capability and other internal capabilities. Here are a few examples:

- Integrate C-SCRM into cybersecurity and enterprise risk management, risk assessment, and improvement processes, and monitor the performance of C-SCRM practices throughout the technology lifecycle. [GV.SC-03, GV.SC-09] See the <u>Enterprise Risk Management Quick-Start</u> <u>Guide</u> for more information on C-SCRM integration.
- Include your relevant suppliers in cybersecurity incident planning, response, and recovery activities. [GV.SC-08] See NIST's <u>Computer Security Incident Handling Guide</u> for more information on key practices for cybersecurity incidents.

Checklist of actions for Activity 1: Create a C-SCRM strategy, objectives, policies, and processes.

- □ Establish a C-SCRM strategy that lays out the objectives of the capability.
- Develop a C-SCRM plan (with milestones) and C-SCRM policies and procedures that guide implementation and improvement of the plan and the capability; socialize those policies and procedures with organizational stakeholders.
- Develop and implement C-SCRM processes based on the strategy, objectives, policies, and procedures that are agreed upon and performed by the organizational stakeholders.
- Establish a cross-organizational mechanism that ensures alignment between functions that contribute to C-SCRM management, such as cybersecurity, IT, legal, human resources, engineering, etc.

Checklist of actions for Activity 2: Identify your organization's technology suppliers and determine how critical each one is to your organization.

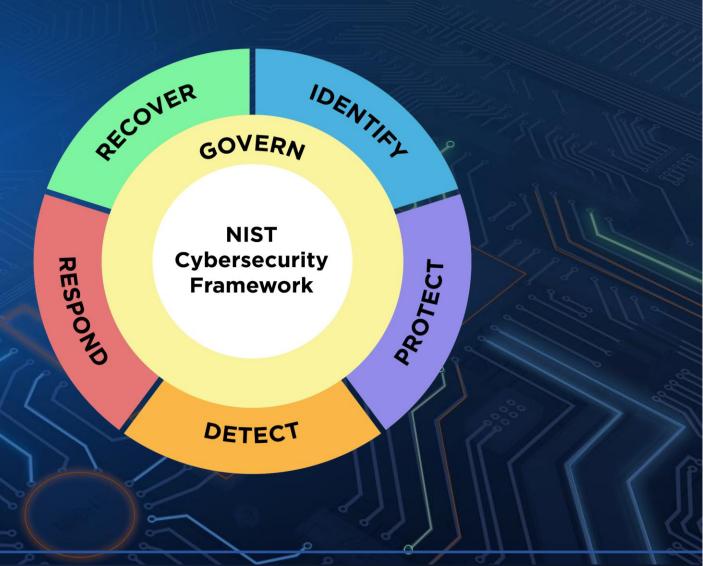
- Develop criteria for supplier criticality based on, for example, the importance of the supplier's products or services to the organization's business, sensitivity of data processed or stored by the supplier, and degree of access to the organization's systems.
- Prioritize suppliers into criticality levels based on the criteria. See NIST IR 8179, <u>Criticality Analysis Process Model: Prioritizing Systems and Components</u> for more information on a structured method for prioritization.
- □ Keep a record of all suppliers, prioritized based on the criticality criteria.

New to C-SCRM?

Here are some NIST resources that can help you get up to speed on the basics of C-SCRM and support you in establishing and operating your C-SCRM capability:

- CSF 2.0 C-SCRM Quick Start Guide
 <u>https://www.nist.gov/quick-start-guides</u>
- Key Practices in Cyber Supply Chain Risk Management: Observations from Industry (NIST IR 8276) https://csrc.nist.gov/pubs/ir/8276/final
- Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations (NIST SP 800-161 Revision 1) https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-161r1.pdf
- The Software and Supply Chain Assurance Forum <u>https://csrc.nist.gov/Projects/cyber-supply-chain-risk-management/ssca</u>
- NIST's C-SCRM Program https://csrc.nist.gov/projects/cyber-supply-chain-risk-management

Additional CSF 2.0 Resources





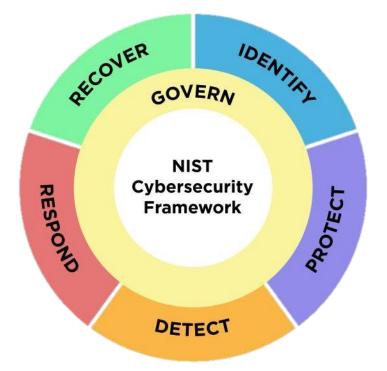
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https://www.nist.gov/cyberframework

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🖉 An official website of the United States government Here's how you know 🗸 NIST Q ∃ Menu Search NIST **CYBERSECURITY** Helping organizations to better understand and improve their management of cybersecurity risk FRAMEWORK **CSF 2.0 Resource Center** Download (PDF) **Quick Start Guides** BIG NEWS | The NIST CSF 2.0 has been released, along with other supplementary resources! Profiles Informative References FAQs **CSF 2.0 Quick Start Guides** Translations For users with specific common goals For industry, government, and organizations to CSE 2.0 Tool reduce cybersecurity risks News and Events View the Quick Start Guides **Read the Document Related Programs** Ways to Engage **Cybersecurity** @ NIST **CSF 2.0 Profiles** Informative References CSF 1.1 Archive + (Mappings) Templates and useful resources for creating and using both CSF profiles See how NIST's resources overlap and share CONNECT WITH US themes See the Profiles V See the Mappings



GOVERN (GV) DENTIFY (ID): T current cyberse understood

inction 💌	Category 💌	Subcategory 💌	Implementation Examples	Informative References
he organization's				
curity risks are				
	Asset Management (ID, ANA): Assets (a.g.			
	Asset Management (ID.AM): Assets (e.g., data, hardware, software, systems,			
	facilities, services, people) that enable			
	the organization to achieve business			
	purposes are identified and managed			
	consistent with their relative importance			
	to organizational objectives and the			
	organization's risk strategy			
		ID.AM-01: Inventories of hardware managed	Ex1: Maintain inventories for all types o	CIS Controls v8.0: 1.1
		by the organization are maintained	hardware, including IT, IoT, OT, and	SP 800-53 Rev 5.1.1: CM-08
			mobile devices	SP 800-53 Rev 5.1.1: PM-05
			Ex2: Constantly monitor networks to detect new hardware and automatically	
			update inventories	
		ID.AM-02: Inventories of software, services,	Ex1: Maintain inventories for all types o	CIS Controls v8.0: 2.1
		and systems managed by the organization are		SP 800-53 Rev 5.1.1: AC-20
		maintained	commercial-off-the-shelf, open-source	SP 800-53 Rev 5.1.1: CM-08
			custom applications, API services, and	SP 800-53 Rev 5.1.1: PM-05
			cloud-based applications and services	SP 800-53 Rev 5.1.1: SA-05
			Ex2: Constantly monitor all platforms,	SP 800-53 Rev 5.1.1: SA-09
			including containers and virtual	
			machines, for software and service	
			inventory changes	
			Ex3: Maintain an inventory of the	
		ID AM 03: Depresentations of the	organization's systems	CIC Constrais v0 0: 2.0
		ID.AM-03: Representations of the organization's authorized network	Ex1: Maintain baselines of communication and data flows within	CIS Controls v8.0: 3.8 SP 800-53 Rev 5.1.1: AC-04
		communication and internal and external	the organization's wired and wireless	SP 800-53 Rev 5.1.1: AC-04 SP 800-53 Rev 5.1.1: CA-03
		network data flows are maintained	networks	SP 800-53 Rev 5.1.1: CA-05
			Ex2: Maintain baselines of	SP 800-53 Rev 5.1.1: PL-02
			communication and data flows betweer	SP 800-53 Rev 5.1.1: PL-08
			the organization and third parties	SP 800-53 Rev 5.1.1: PM-07
			Ex3: Maintain baselines of	
			communication and data flows for the	
			organization's infrastructure-as-a-servic	
			(laaS) usage	
			Ex4: Maintain documentation of	
			expected network ports, protocols, and	CIC Combrollo vi0 0: 45 4
		ID.AM-04: Inventories of services provided by suppliers are maintained	Ex1: Inventory all external services used by the organization, including third-part	CIS Controls v8.0: 15.1 SP 800-53 Rev 5.1.1: AC-20
		suppriers are manitamen	by the organization, including third-pan infrastructure-as-a-service (laaS),	SP 800-53 Rev 5.1.1: AC-20 SP 800-53 Rev 5.1.1: SA-09
			platform-as-a-service (PaaS), and	SP 800-53 Rev 5.1.1: SA-09
			software-as-a-service (SaaS) offerings;	
			APIs; and other externally hosted	
			annlication services	

Cybersecurity Framework 2.0 Reference Tool

https://www.nist.gov/informative-references

ExporTech – Accelerating sales growth in global markets for small and medium-sized manufacturers



https://www.nist.gov/mep/mep-national-network



A unique public-private partnership that delivers comprehensive, proven solutions to U.S. manufacturers, fueling growth and advancing U.S. manufacturing.

Our mission is to strengthen and empower U.S. manufacturers.

MEP National Network



Centers located in all 50 states and Puerto Rico.



Public-private partnership with local flexibility.



Federal funds, state investments, and private sector fees cover services.



Market driven program that creates high value for manufacturers.



Leverage partners to maximize service offerings.



Transfer technology and expertise to manufacturers.

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Business Solution Examples



ExporTech is a structured process that helps exporters expand sales in global markets

PLAN	 Develop strategic export growth plan through workshops, planning tools, and individual coaching Receive plan feedback from experienced international business leaders
EDUCATE	 Learn from wide range of experts – with opportunity for individualized consultation
CONNECT	 Companies meet experts that become part of their network Learn about programs, services, and grants that many exporters are unaware of Learn from peer companies – and hold each other accountable
 IMPLEMENT Execute plan, and connect to resources that can help you go-to-market (e search and matchmaking, STEP grants, tradeshows) Achieve higher ROI on business development – guided by plan 	

ExporTech Program Partners

Exporters

Local Partners (differ by region)

- District Export Councils
- State trade
 offices/organizations
- FedEx
- Universities, colleges
- SBDCs, SBA offices
- World Trade Centers
- Private consultants
- State and federal department of agriculture
- Other economic development organizations
- City governments



- Delivery
- Selling, marketing
- Program management



U.S. Commercial Service

- Delivery
- Selling, marketing
- Program management

Principles/Philosophy of ExporTech

- Aimed at leadership
- Each company develops strategic international growth plan, receives feedback for go-to-market strategy
- Customized to participants
- Highly interactive breakouts, oneon-ones, speed dating



ExporTech Unique Elements

- Development of export plan with feedback in final session
- Breakout groups working on elevator pitch
- Coaching in between sessions
- Connection to export ecosystem expand network
- Significant involvement of experienced exporting company executives (plan feedback, panel discussions, breakout consultations)





ExporTech National Program History and Impacts

Program Summary (6/20/24)

# Programs Completed (since inception in 2007)	275
# States	37 (and PR)
# Participating Companies	1,380



An Export Acceleration System for Achieving Profitable Growth

Client Impact

•Average sales increase/retention of \$469,000

- Average cost savings of **\$93,000**
- •Average 6 new jobs per company
- •Total program impact to date: >\$600 million sales increase/retention

Success Story

Hydronalix Grows Export Markets Fivefold in Five Years

- Manufactures robotic water rescue systems and small unmanned watercraft in Green Valley, Arizona.
- First responders and military use: water rescue, bridge inspection, scientific research and law enforcement on oceans, lakes, and rivers.
- *The Challenge:* selling into export markets but no defined strategy/process.
- ExporTech partners helped company develop an export plan how to structure and negotiate payment terms to ensure up-front payment.
- Executed export plan through international trade shows and trade mission initiatives led by the AZSTEP program met with potential sales channel partners, end-users and buyers.

"I think the success of the program is because it's been repeatable and sustainable. It takes a lot of continuous effort to grow our global customer base. In our case, ExporTech provided that critical push. In 2016, before we started ExporTech, I think we were selling in 11 or 12 countries. Now we have distributors in 33 countries, and we sell our products in 50 countries. The program has had a big impact on our business." Hydronalix CEO IUFACTURING EXTENSION PARTNERSHIP • NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY • U.S. DEPARTMENT OF COMMERCI





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CSF 2.0 FAQs:	
https://www.nist.gov/faqs	
CSF 2.0 Small Business Quick Start Guide:	smallbizsecurity@nist.gov
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https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1305.ipd.pdf	
Cybersecurity and Privacy Reference Tool (CPRT):	<u>cprt@nist.gov</u>
https://csrc.nist.gov/Projects/cprt	
NIST International Cybersecurity and Privacy Resources:	intl-cyber-privacy@nist.gov
https://www.nist.gov/cybersecurity/international-cybersecurity-and-privacy-resources	
Computer Security Resource Center:	csrc-inquiry@nist.gov
https://csrc.nist.gov/publications	
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Questions?