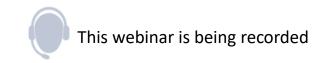


What's Ahead for the NIST Small Business Cybersecurity Program in 2024?

January 10, 2024 2:00 p.m. – 2:45 p.m. EST

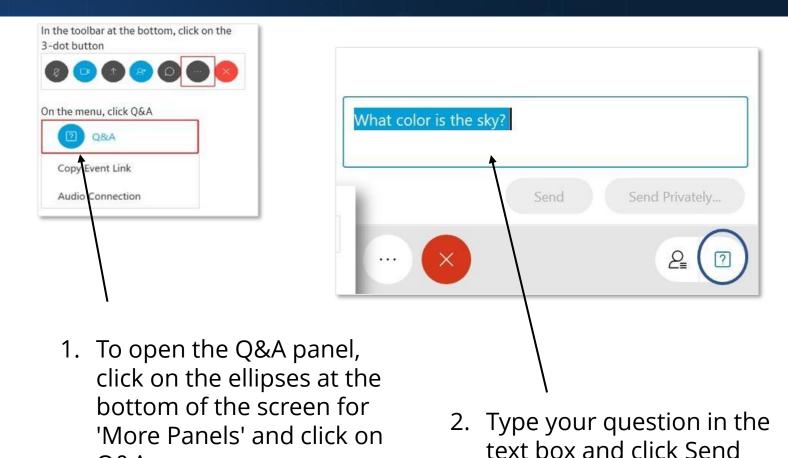




Submitting Questions



Please use the Q&A window to enter your questions.



Q&A.

Welcoming Remarks





Daniel Eliot

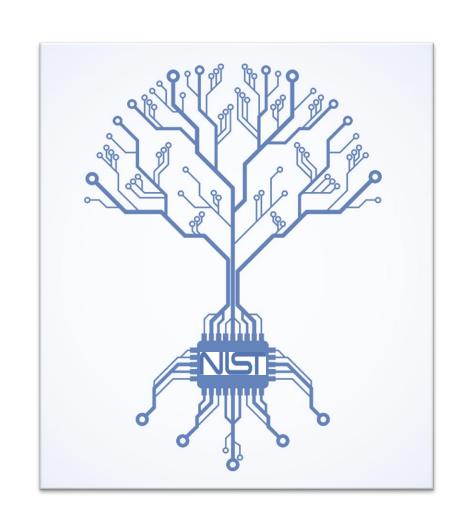
Lead for Small Business Engagement
Applied Cybersecurity Division
National Institute of Standards and Technology
daniel.eliot@nist.gov

Celebrating 50+ Years in Cybersecurity



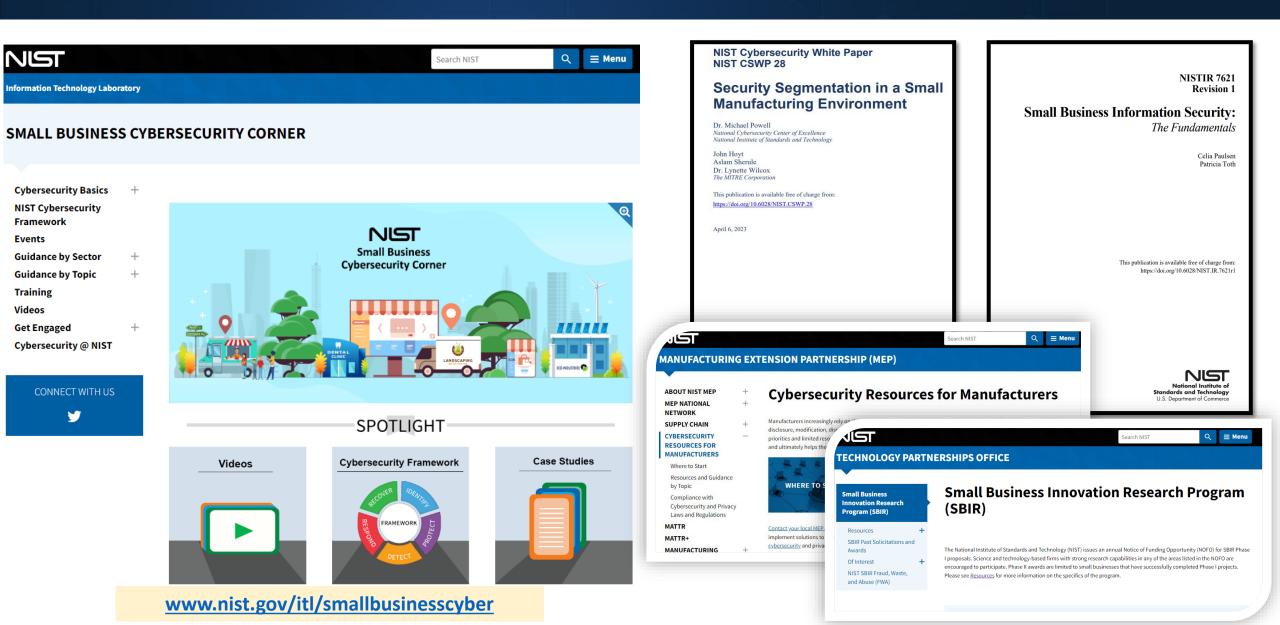
We cultivate trust by advancing cybersecurity & privacy standards & guidelines, technology, & measurement science.

nist.gov



Helping the Nation's Small Business Community Identify, Assess, Manage, and Reduce their Cybersecurity Risks



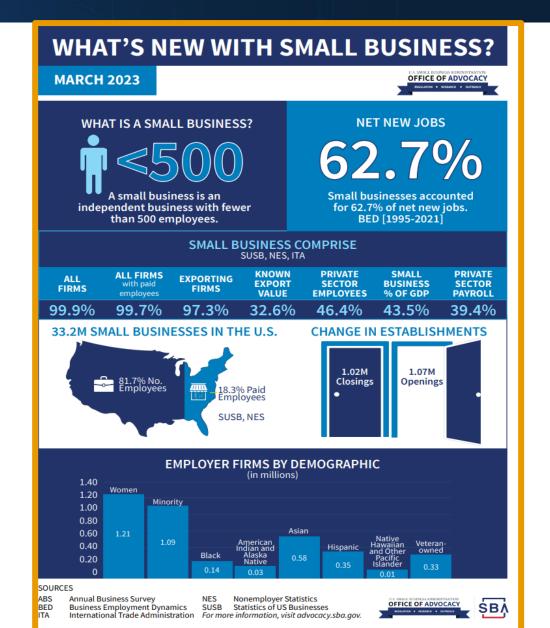


How are we Defining Small Business?



- The U.S. Small Business Administration's Office of Advocacy generally defines a small business as an independent business having fewer than 500 employees.
- Of 33.2 million small businesses, 27.1 million (81.7%) are run by a single owner and have no employees.
- For those with employees:
 - In 2020, small firms averaged 11.7 employees. New firms (less than 2 years old) averaged 6 employees, while firms older than 20 years averaged 60 employees.

https://advocacy.sba.gov/2023/03/07/frequently-asked-questions-about-small-business-2023/



Facing the Facts



- Cybersecurity has become a fundamental risk that must be addressed alongside other business risks.
- Size often doesn't matter to a threat actor.
- Small businesses can be more agile and innovative in response to cybersecurity risks.
- Most small business owners and employees are not cybersecurity experts.
- There are actionable steps smaller organizations can take to begin managing cybersecurity risks.

Parallel Tracks



The Fundamentals



Critical and Emerging Technologies



ARTIFICIAL INTELLIGENCE

Transparent, trustworthy Al and machine learning



ADVANCED COMMUNICATIONS

(5G and beyond) and wireless technologies



BIOTECHNOLOGY

And engineering biology to impact the health, agricultural, and industrial sectors



ENERGY TECHNOLOGIES

Generation, storage, distribution, and secure, climate-friendly, efficient utilization of energy



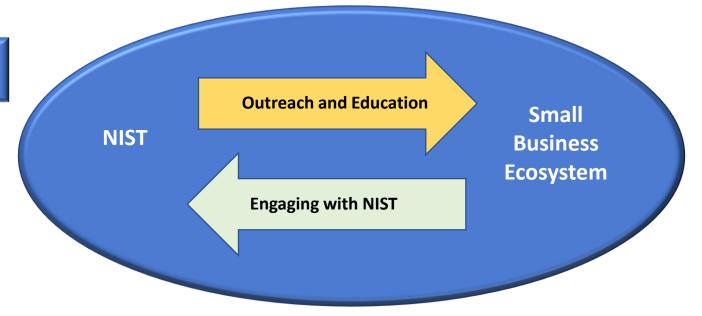
CYBERSECURITY AND PRIVACY

To enable the development and deployment of emerging technologies



QUANTUM INFORMATION SCIENCE

Leveraging quantum mechanics for the storage, transmission, manipulation, computing, or measurement of information



Initial Goals for 2024



Education:

- ✓ Understanding NIST—who we are and how we support U.S. innovation and industrial competitiveness.
- ✓ Working with NIST subject matter experts from across our diverse research portfolio to develop cybersecurity resources, communication materials, and collateral tailored for the SMB community.

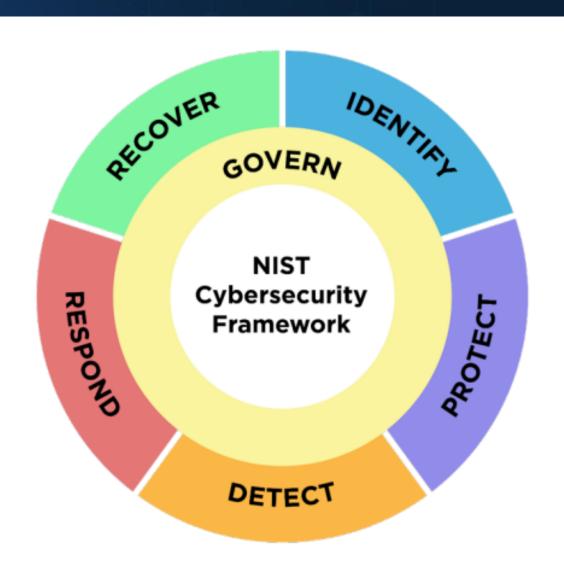
Engagement:

- ✓ Deepening/expanding our SMB-focused work and relationships across the federal government.
- ✓ Deepening/expanding NIST's relationship with small business-focused resource partners who are the 'boots-on-the-ground.'
- ✓ Deepening/expanding our work with the SMB community directly.
 - ✓ Getting NIST more involved in SMB-focused events—both attending them, speaking at them, and hosting them.
 - ✓ Creating more opportunities to listen to the SMB community to better understand their needs/challenges.
 - ✓ Highlighting opportunities for the SMB community to get more involved in NIST's work.

What's Coming?



- NIST SMB Cybersecurity COI Sub-Groups
- NIST-hosted SMB events
- Going out into the SMB community to engage
- CSF 2.0 in 2024
- Development of topical fact sheets on key NIST technology/research areas





The NIST Small Business Community of Interest (COI)

Over 7,000 individuals have already joined the full COI!

Convening companies, trade associations, and others who can share business insights, expertise, challenges, and perspectives to guide our work and assist NIST to better meet the cybersecurity needs of small businesses.

Join Here: www.nist.gov/itl/smallbusinesscyber/about-contact-us/subscribe

NIST SMB COI Sub-Groups



Subgroup	Definition	Meeting Dates	How to Join
SMB Owners/ Operators	,	February 14, 2024 April 17, 2024 July 17, 2024 October 17, 2024	Email: NIST-SMB-Owners+subscribe@list.nist.gov
SMB Vendors and Resource Partners	SBDCs, SCORE, etc.) to share best practices and resources	February 21, 2024 April 24, 2024 July 24, 2024 October 24, 2024	Email: NIST-SMB-Vendors+subscribe@list.nist.gov

Learn More Here: https://www.nist.gov/itl/smallbusinesscyber/get-engaged



Upcoming Events in 2024

Public Webinars (all 2:00-2:45 ET)

- March 20: CSF 2.0 for SMB
- May 2: Manufacturing Extension Partnership (MEP) Cybersecurity Services
- August 15: Open topic

SMB Owner/Operator COI Subgroup Calls

- February 14, 2024
- April 17, 2024
- July 17, 2024
- October 17, 2024

SMB Vendor/Resource Partner COI Subgroup Calls

- February 21, 2024
- April 24, 2024
- July 24, 2024
- October 24, 2024

Register Here: https://www.nist.gov/itl/smallbusinesscyber/events



Events in January 2024

Out in the Community

- January 24: Path to Prosperity Event in Little Rock, AK https://www.usda.gov/path-to-prosperity
- January 30: DAF CISO's Blue Cyber "Cybersecurity Resources Lollapalooza" Ten Agencies offer their services to US Small Businesses <u>www.sbir.gov/events</u>
- Have an event you'd like us to participate in? Email: smallbizsecurity@nist.gov

Cybersecurity Framework

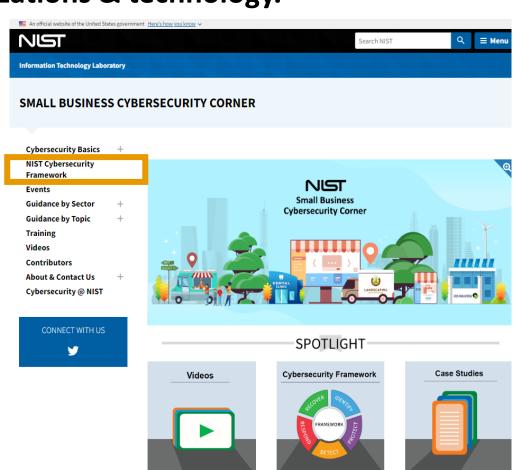




The NIST Cybersecurity Framework (CSF) helps organizations reduce their cybersecurity risks and is widely recognized as foundational to securing organizations & technology.

- CSF 2.0 to be published in 2024.
- Recently, we made SMB-focused resources based on the CSF 2.0 easier to find on the NIST Small Business Cybersecurity Corner website.
- As NIST publishes new SMB resources for the CSF 2.0, they will be housed here.

www.nist.gov/itl/smallbusinesscyber



NIST Small Business Cybersecurity Corner



Your secure business is just around the corner.



Guidance by Topic



SMALL BUSINESS CYBERSECURITY CORNER

Cybersecurity Basics NIST Cybersecurity Framework

Guidance by Sector

Guidance by Topic

Training

Videos

Contibutors

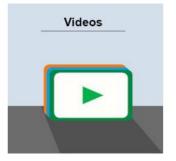
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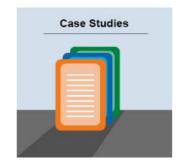
CONNECT WITH US











LATEST RESOURCES

 Security Segmentation in a Small Manufacturing Environment. This paper outlines a six-step approach that manufacturers can follow to implement security segmentation and mitigate cyber vulnerabilities in their manufacturing environments.

- ✓ All-Purpose Guides
 - ✓ Phishing
- ✓ Choosing A Vendor/Service Provider

Privacy

✓ Cloud Security

Protecting Against Scams

Government Contractor Requirements

Ransomware

- **Developing Secure Products**
- ✓ Securing Data and Devices
- **Employee Awareness**
- **Securing Network** Connections

Multi-Factor Authentication ✓ Telework

Short Videos

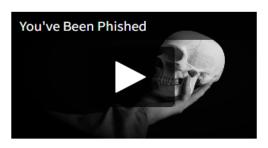


Phishing



See the Phishing companion PDF here.

You've Been Phished



NIST research has uncovered one reason, and the findings could help CIOs mount a better defense.

Multi-Factor Authentication



See the Multi-Factor Authentication companion PDF <u>here</u>.

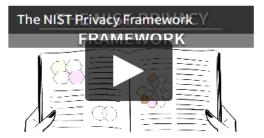
Ransomware



See the Ransomware companion PDF here.

Short videos that also include a companion PDF handout.

The NIST Privacy Framework



Learn more here.

www.nist.gov/itl/smallbusinesscyber/videos

Small Business Case Studies





SCENARIO:

A 10-person consulting firm sent a small team to South America to complete a client project. During their stay, an employee used a business debit card at a local ATM. A month after returning to the US, the firm received overdraft notices from their bank. They identified fraudulent withdrawals of \$13,000, all originati

ATTAC

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who disabled the laptop's remote access and began monitoring activity. The laptop was equipped with security tools and password protection. Data stored on the hard drive was not encrypted - this included sensitive, personal patient data. The hospital had to follow state laws as they pertain to a data breach.

SMALL BUSINESS CYBERSECURITY CASE STUDY SERIES

SMALL BUSINESS CYBERSECURITY CASE STUDY S

Hotel CEO Finds Unwelcome Guests in Email Account

SCENARIO:

The CEO of a boutique hotel realized their business had become the victim of wire fraud when the bookkeeper began to receive insufficient fund notifications for regularly recurring bills. A review of the

accounting records a link in an email the credentials, the cybe business and person

ATTACK:

Social engineering, A phishing attack is a form a

RESPONSE:

The hotel's cash res

hotel also contacted

from an authentic source, su you to open a malicious atta

A health care system executive left their work-issued laptop, which had access to over 40,000 medical records, in a locked car while running an errand. The car was broken into, and the laptop stolen

Stolen Hospital Laptop Causes Heartburn

ATTACK:

Physical theft of an unencrypted device.

Encryption is the process of scrambling readable text so it can only be read by the person who has the decryption key. It creates an added layer of security

RESPONSE:

The employee immediately reported the theft to the police and to the health care system's IT department The U.S. Department of Health and Human Services was also notified. Personally Identifiable Information (PII) and Protected Health Information (PHI) data require rigorous reporting processes and standards

1-page case studies, each including:

- Brief scenario
- Impact to business
- Lessons learned
- Discussion questions
- And related resources

More to come!

www.nist.gov/itl/smallbusinesscyber/cybersecurity -basics/case-study-series

How Can You Participate?





Attend our events: https://www.nist.gov/itl/smallbusinesscyber/events



Become an active participant in one of our COI sub-groups: https://www.nist.gov/itl/smallbusinesscyber/about-contact-us/subscribe



Send questions, comments, project ideas or request a speaker for your event: smallbizsecurity@nist.gov



Submit comments on our publications: csrc.nist.gov/publications/drafts-open-for-comment



Become a collaborator on an NCCoE project: https://www.nccoe.nist.gov/seeking-collaborators

Other NIST SMB Opportunities





NIST SBIR/STTR Program:

- https://www.nist.gov/tpo/small-business-innovation-research-program-sbir
- https://www.sbir.gov/



NIST Cybersecurity and Privacy Stakeholder Engagement • https://www.nist.gov/cybersecurity/cybersecurity-privacy-stakeholder-engagement

