

CYBERSECURITY SERVICES FOR BUILDING CYBER RESILIENCE

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INTRODUCTION



Rob Main

- 34+ years of experience in Information Technology and Cybersecurity
- Certified Government Chief Information Officer – UNC-CH
- Masters of Business Administration – ECU
- Bachelor of Computer Science Degree – Troy University
- 25-year military veteran (USAF and NC Air National Guard)

INTRODUCTION

Anthony E. Carbone



- 38+ Years IT/Crypto/COMSEC/Cybersecurity Experience
 - 22 Years U.S. Air Force (Retired)
 - 4 Years Command Information Assurance Manager (C-IAM) – SPAWAR-SSC Charleston
 - 11 Years Special Agent – Defense Counterintelligence & Security Agency (DCSA)
- Masters of Science in Telecommunications Management – Golden Gate University
- Bachelor of Science in Information Systems Management – University of Maryland University College (UMUC)
- Certified Risk Management Framework (RMF) Security Control Assessor (SCA) & Fully Qualified U.S. Navy RMF Certifier
- Certified Ethical Hacker & Governance, Risk and Compliance (CEH/CGRC)
- Certified Enterprise Risk Professional & Independent Assessor (CERP/CEIA)

Agenda

- **Introduction and Mission**
- **Coordinators and Advisors**
- **Cyber Risk Management and Operational Resilience**
- **CISA Cyber Services and Assessments**
- **Information Sharing**
- **Additional Resources**
- **Q & A**



Cybersecurity and Infrastructure Security Agency (CISA)

VISION

Secure and resilient
infrastructure for the
American people.

MISSION

We lead the National effort
to understand, manage, and
reduce risk to our cyber and
physical infrastructure.

TLP: GREEN



OVERALL GOALS

GOAL 1

DEFEND TODAY

Defend against urgent
threats and hazards

seconds | days | weeks

GOAL 2

SECURE TOMORROW

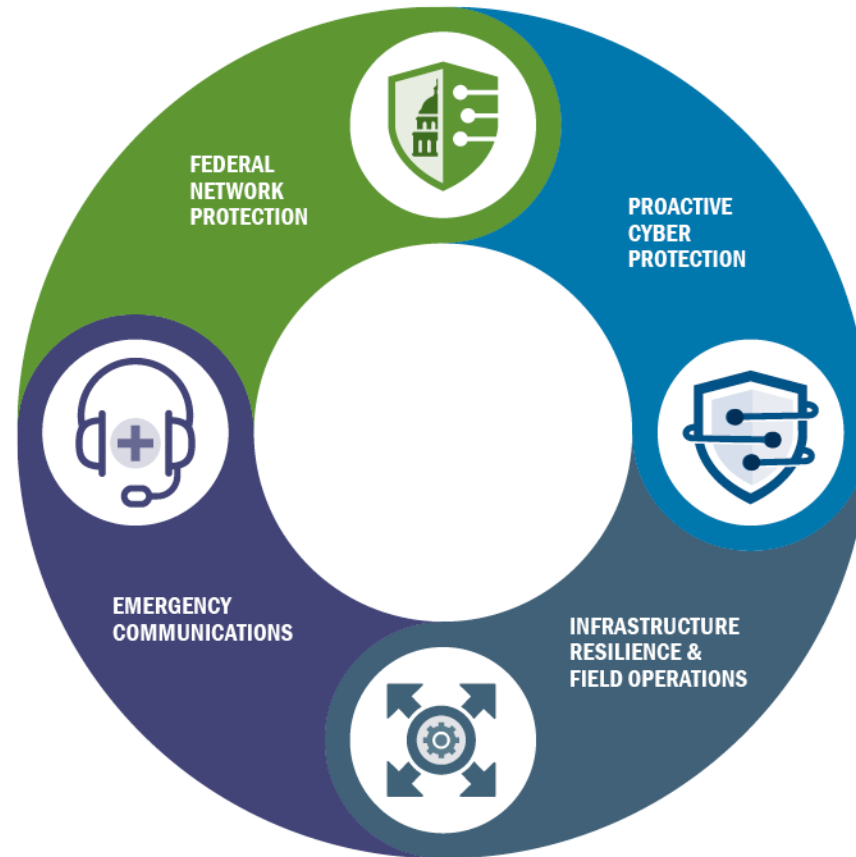
Strengthen critical
infrastructure and
address long-term risks

months | years | decades

CYBERSECURITY &
INFRASTRUCTURE
SECURITY AGENCY

The Nation's Risk Managers

The Cybersecurity and
Infrastructure Security Agency
(CISA) is the pinnacle of national
risk management for cyber and
physical infrastructure



Our Work

The Cybersecurity and Infrastructure Security Agency (CISA) works with partners to defend against today's threats and collaborating to build more secure and resilient infrastructure for the future



PARTNERSHIP
DEVELOPMENT



INFORMATION AND
DATA SHARING



CAPACITY BUILDING



INCIDENT
MANAGEMENT
& RESPONSE



RISK ASSESSMENT
AND ANALYSIS



NETWORK DEFENSE



EMERGENCY
COMMUNICATIONS

Divisions of CISA



Today's Risk Landscape

America remains at risk from a variety of threats:



INSIDER THREAT



ACTS OF TERRORISM



CYBER ATTACKS



EXTREME WEATHER



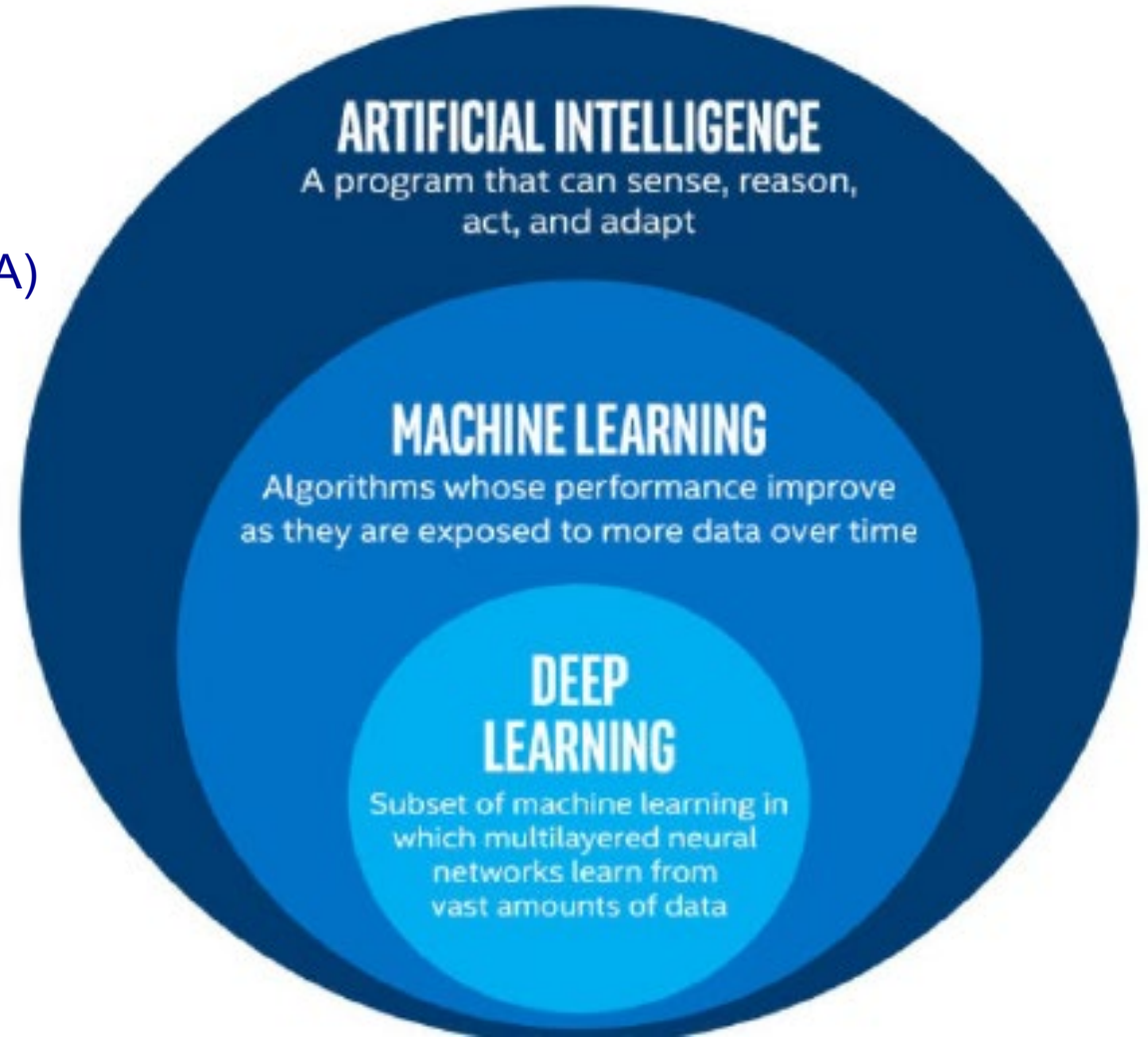
PANDEMICS



ACCIDENTS OR TECHNICAL FAILURES

Advanced Threats

- **Social Engineering**
 - Scattered Spider (aka – Starfraud & UNC3944)
 - SIM Swapping
 - Account Takeovers (Reset Passwords, remove MFA)
 - Data Exfiltration, Extortion, Ransomware
- **Artificial Intelligence (AI)**
 - Machine Learning
 - Neural Networks
 - Large Language Models
 - Generative AI
 - Deep Fakes



Roadmap for Artificial Intelligence

Purpose

CISA's AI Roadmap is a whole-of-agency plan aligned with national AI strategy to align our cross-agency efforts and communicate our role in AI safety and security.

Areas of Focus

1. Promote the beneficial uses of AI to **enhance cybersecurity capabilities.**
2. Ensure **AI systems are protected from cyber-based threats.**
3. **Deter the malicious use of AI capabilities** to threaten the critical infrastructure Americans rely on every day.



Quantum Computing and Artificial Intelligence

What is Quantum Computing?

- Rapidly evolving field which harnesses the unique qualities of quantum mechanics to solve the most complex problems beyond the capabilities of classical computing

Cryptographically Relevant Quantum Computer (CRQC):

- Small, laboratory-scale examples have been built
- Capable of undermining public key algorithms used for asymmetric key exchanges & digital signatures
- Pre-shared keys *may* mitigate the threat

CRQC and AI Opportunities:

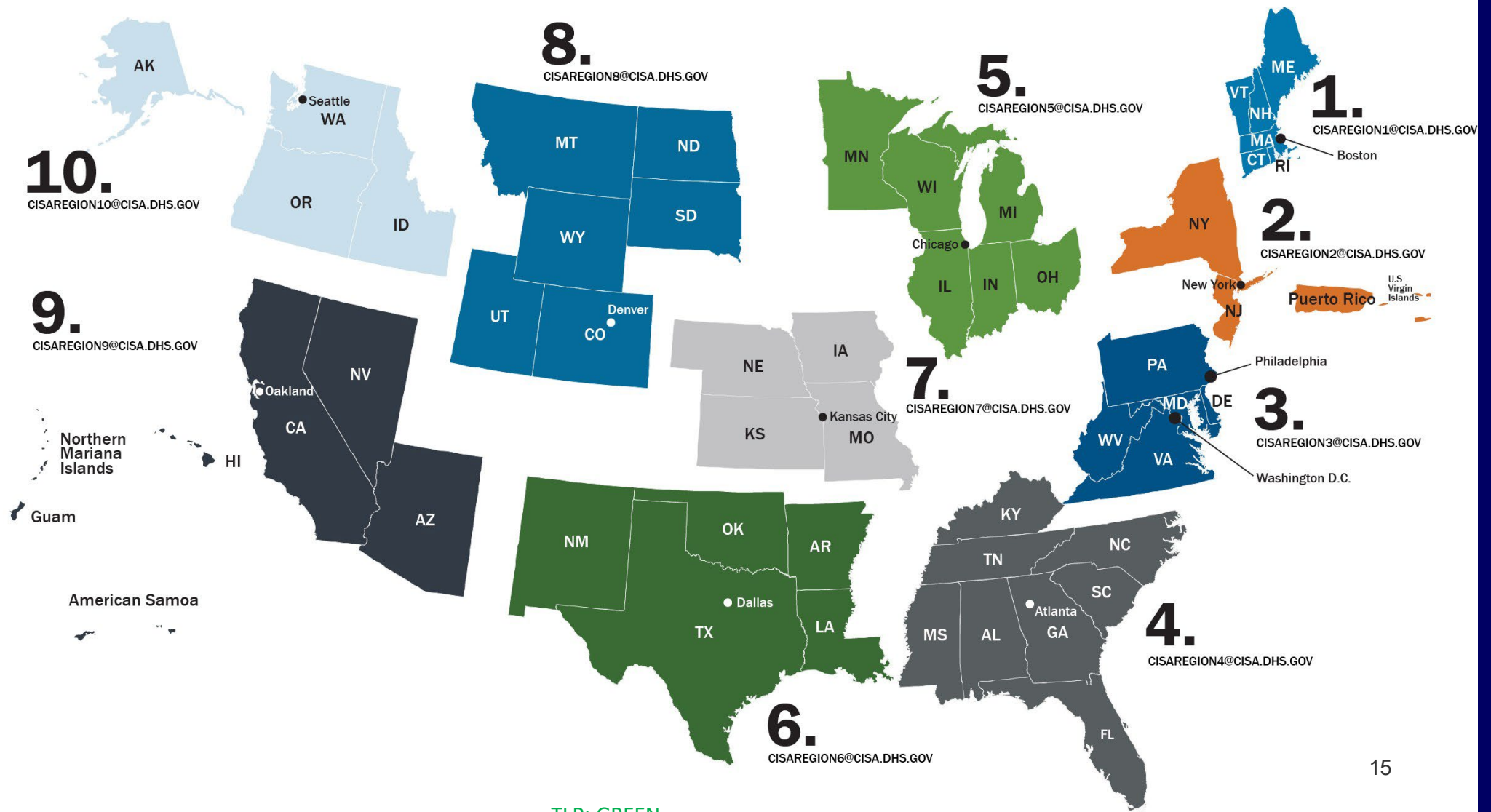
- Reduce training data needed for LLM
- Reduce training time needed for LLM
- Increase capabilities of LLM

CRQC and AI Risks:

- Training data manipulation
- Exploitation of algorithmic vulnerabilities
- De-anonymization of private data
- Malicious content generation

CISA Regions

- 1 Boston, MA
- 2 New York, NY
- 3 Philadelphia, PA
- 4 Atlanta, GA
- 5 Chicago, IL
- 6 Dallas, TX
- 7 Kansas City, MO
- 8 Denver, CO
- 9 Oakland, CA
- 10 Seattle, WA



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CYBERSECURITY + INFRASTRUCTURE SECURITY AGENCY

REGION IV

REGION IV
AT-A-GLANCE

REGIONAL
OFFICE:
**ATLANTA,
GEORGIA**

LOCATION:
**8
STATES
6
TRIBAL
NATIONS**

SIZE:
**394,420
SQUARE
MILES**

ESTIMATED
POPULATION:
**65.733
MILLION**

- KEY FACTS:
- Contains 17 nuclear power facilities (with applications for nine new sites pending). These facilities supply 29 percent of the nation's electrical power output
 - Harbors six nationally critical ports
 - Home to 7 of the country's fastest growing cities: Orlando, FL; Nashville, TN; Cape Coral, FL; West Palm Beach, FL; North Port, FL; Lakeland, FL; and Raleigh, NC (2018 data).

Protective Security Advisors

Protective Security Advisors (PSA) have five mission areas directly supporting the protection of critical infrastructure:

- Plan, coordinate, and conduct **physical** security surveys and assessments
- Plan and conduct outreach activities – public & private sector
- Support National Special Security Events (NSSEs) & Special Event Activity Rating (SEAR) events
- Support state and federal partners with critical infrastructure recovery post-incident
- Coordinate and support improvised explosive device awareness and risk mitigation training & assessments



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Emergency Communications Coordinators

Governance



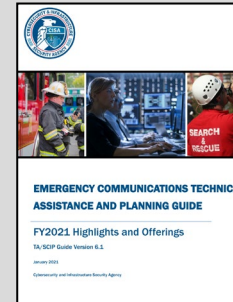
Regional Coordination

Strategic Planning



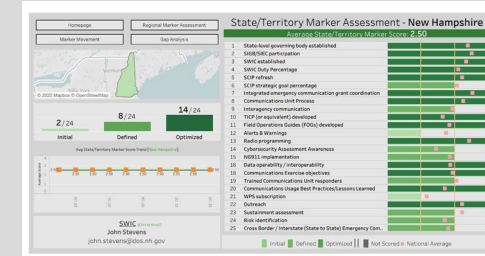
State & Tribal Communications Interoperability Plans

Technical Assistance



Service Offerings Guides

Assessments



State Markers

ECCs support emergency communications across government and critical infrastructure

STATEWIDE INTEROPERABILITY COORDINATOR (SWIC)

ECCs maintain close relationships with SWICs and public safety personnel in their regions



Special Coordination
ESF-2 | NSSE | SEAR



6,000+
Public Safety Answering Points (911)



50,000+
Radio Systems



400,000+
Cell Towers & Radio Sites



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Chemical Security Inspectors**

Chemical Security Inspectors visit chemical facilities to ensure that they meet the security requirements set forth by the **Chemical Facility Anti-Terrorism Standards (CFATS) Regulatory Security Program**. The CFATS program identifies and regulates high-risk Chemical facilities to ensure they have security measures in place to reduce the risk that certain hazardous chemicals are not weaponized by terrorists.

- **Plan, coordinate, and conduct regulatory Inspections and Compliance Assistance Visits**
- **Plan & Conduct Outreach engagement activities**
- **Support Enforcement Operations**
- **Support Chemical sector security events**



Election Security Advisors

- On **July 25, 2023**, Director Easterly announced the creation of these ten positions (one per region) due to the unparalleled importance of elections as a foundational component of who we are as a nation
- **Build strong connective tissue between the state and local election officials and CISA**
- **Experts in the differences in election infrastructure, jurisdiction requirements, and operating environments in their regions** so they can offer more targeted guidance and support
- **Bottom line**, doing more for election officials and are where they need ESAs to be to make that happen



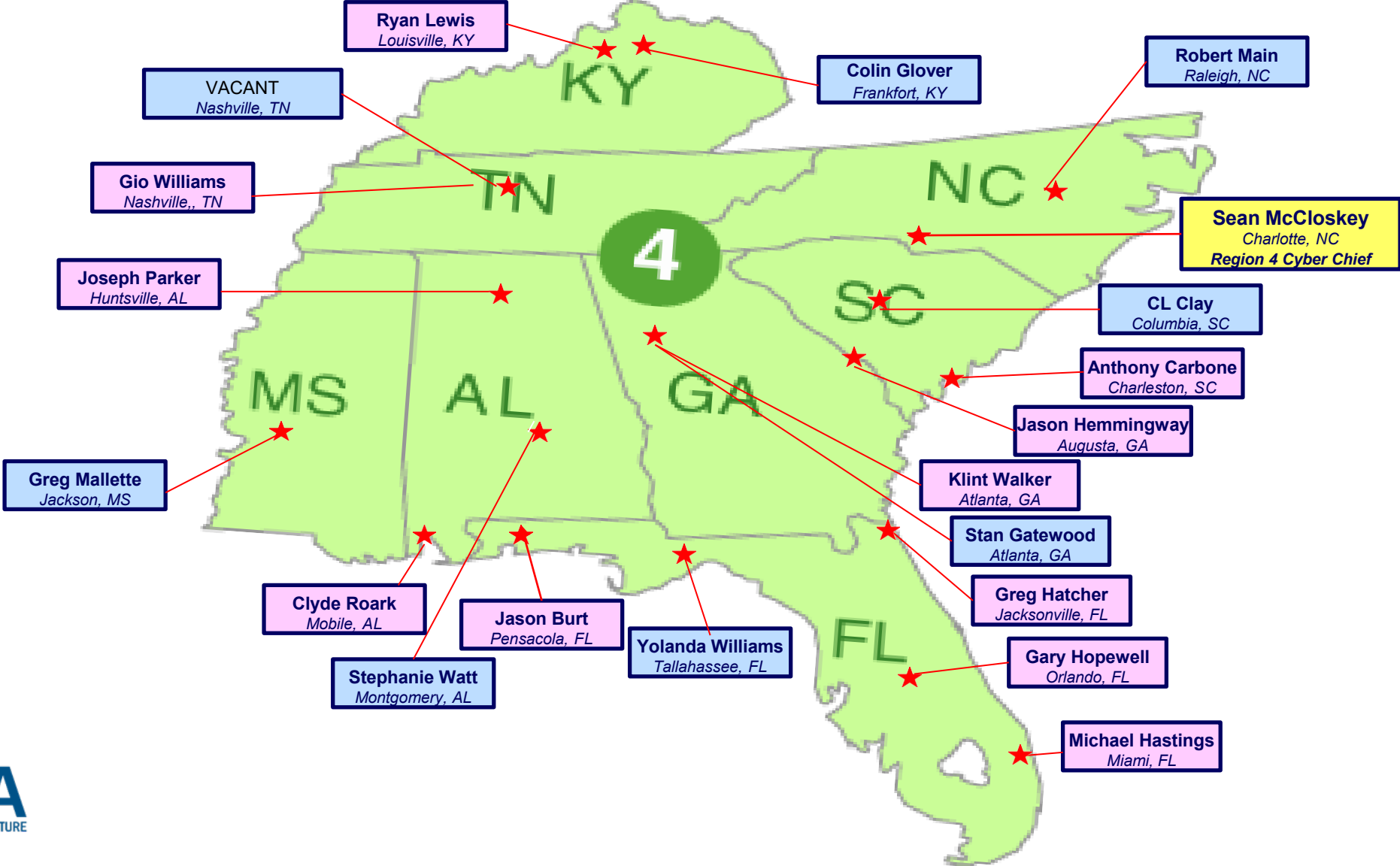
CYBERSECURITY STATE COORDINATORS AND ADVISORS



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CISA Region 4 Cyber Support



CSC / CSA Lines of Effort

• Preparedness Activities

- Cybersecurity Assessments
- Cybersecurity Training and Awareness
- Cyber Exercises and “Playbooks”
- Information / Threat Indicator Sharing
- National Cyber Awareness System
- Vulnerability Notes Database
- Information Products and Recommended Practices



• Response Assistance

- Remote / On-Site Response and Assistance
- Incident Coordination
- Threat intelligence and information sharing
- Malware Analysis

• Cybersecurity Advisors

- Incident response coordination
- Cyber assessments
- Workshops
- Working group collaboration
- Advisory assistance
- Public Private Partnership Development


















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Contact CISA to report a cyber incident

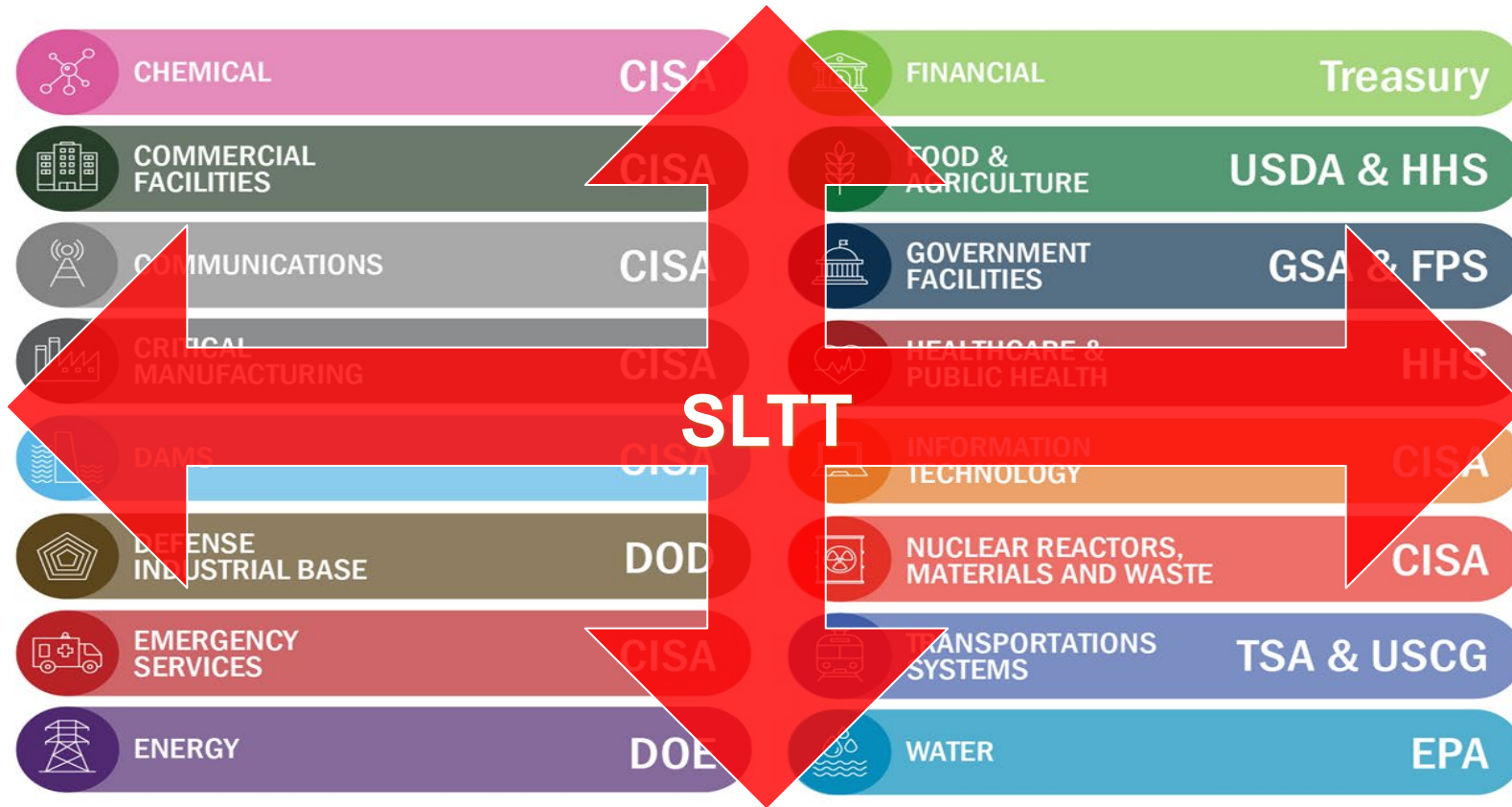
Call 1-888-282-0870 | email CISAservicedesk@cisa.dhs.gov | visit <https://www.cisa.gov>

Critical Infrastructure Sectors

CISA assists the public and private sectors secure its networks and focuses on organizations in the following 16 critical infrastructure sectors.

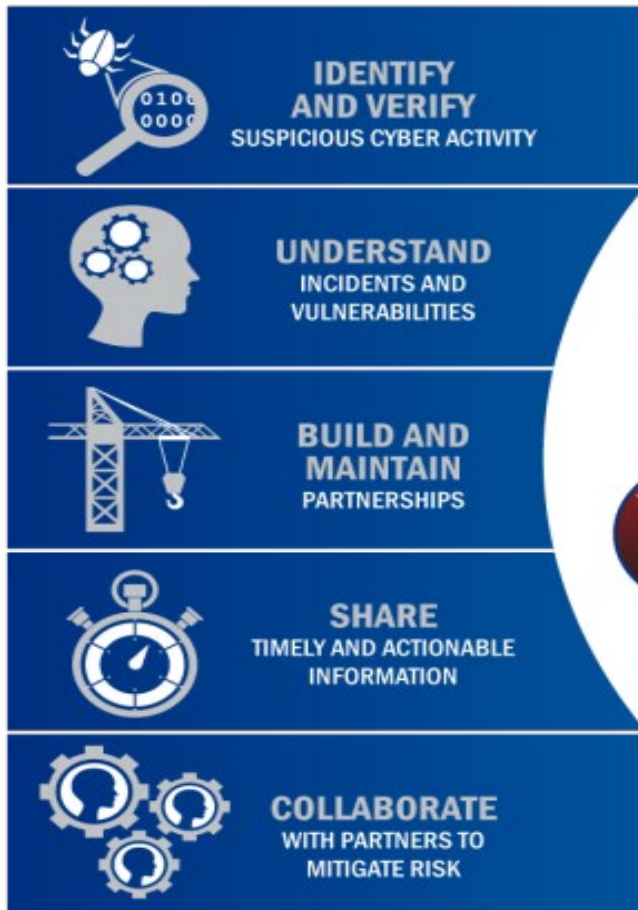
 CHEMICAL	CISA	 FINANCIAL	Treasury
 COMMERCIAL FACILITIES	CISA	 FOOD & AGRICULTURE	USDA & HHS
 COMMUNICATIONS	CISA	 GOVERNMENT FACILITIES	GSA & FPS
 CRITICAL MANUFACTURING	CISA	 HEALTHCARE & PUBLIC HEALTH	HHS
 DAMS	CISA	 INFORMATION TECHNOLOGY	CISA
 DEFENSE INDUSTRIAL BASE	DOD	 NUCLEAR REACTORS, MATERIALS AND WASTE	CISA
 EMERGENCY SERVICES	CISA	 TRANSPORTATIONS SYSTEMS	TSA & USCG
 ENERGY	DOE	 WATER	EPA

Critical Infrastructure Sectors



Serving Critical Infrastructure

KEY ACTIVITIES:



16 CRITICAL INFRASTRUCTURE SECTORS:



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CYBER RISK MANAGEMENT AND OPERATIONAL RESILIENCE

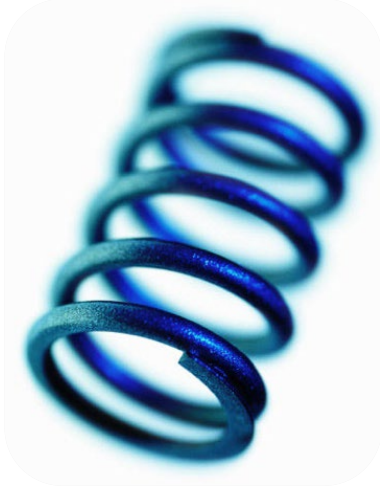


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CAO October 8, 2024

What Is Resilience?

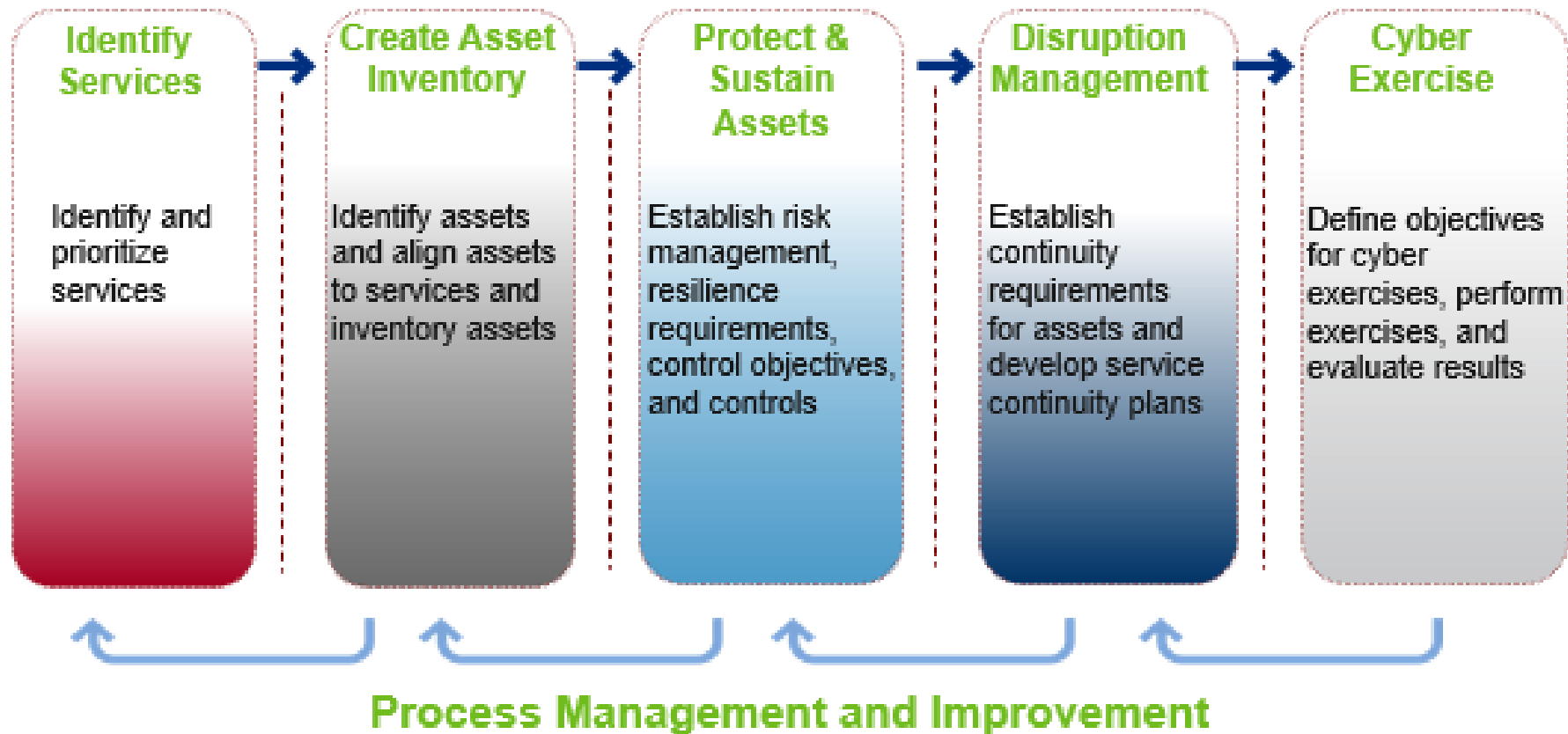


“... the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions. Resilience includes the ability to withstand and recover from deliberate attacks, accidents, or naturally occurring threats or incidents...”

– Presidential Policy Directive – PPD 21
Critical Infrastructure Security and Resilience
February 12, 2013

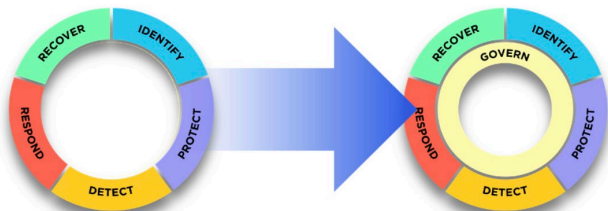
Working Towards Cyber Resilience

Follow a **framework** or general approach to cyber resilience. One successful **iterative** approach includes:



NIST CSF - Functions

- The Cybersecurity Framework
 - Establishes a common perspective and vernacular,
 - Provides risk-based guidelines,
 - Is collaboration-oriented, and
 - Is internationally recognized.
- For more information, visit nist.gov/cyberframework



Function	Category	Category Identifier
Govern (GV)	Organizational Context	GV.OC
	Risk Management Strategy	GV.RM
	Cybersecurity Supply Chain Risk Management	GV.SC
	Roles, Responsibilities, and Authorities	GV.RR
	Policies, Processes, and Procedures	GV.PO
	Oversight	GV.OV
Identify (ID)	Asset Management	ID.AM
	Risk Assessment	ID.RA
	Improvement	ID.IM
Protect (PR)	Identity Management, Authentication, and Access Control	PR.AA
	Awareness and Training	PR.AT
	Data Security	PR.DS
	Platform Security	PR.PS
	Technology Infrastructure Resilience	PR.IR
Detect (DE)	Continuous Monitoring	DE.CM
	Adverse Event Analysis	DE.AE
Respond (RS)	Incident Management	RS.MA
	Incident Analysis	RS.AN
	Incident Response Reporting and Communication	RS.CO
	Incident Mitigation	RS.MI
Recover (RC)	Incident Recovery Plan Execution	RC.RP
	Incident Recovery Communication	RC.CO

CISA CYBER SERVICES

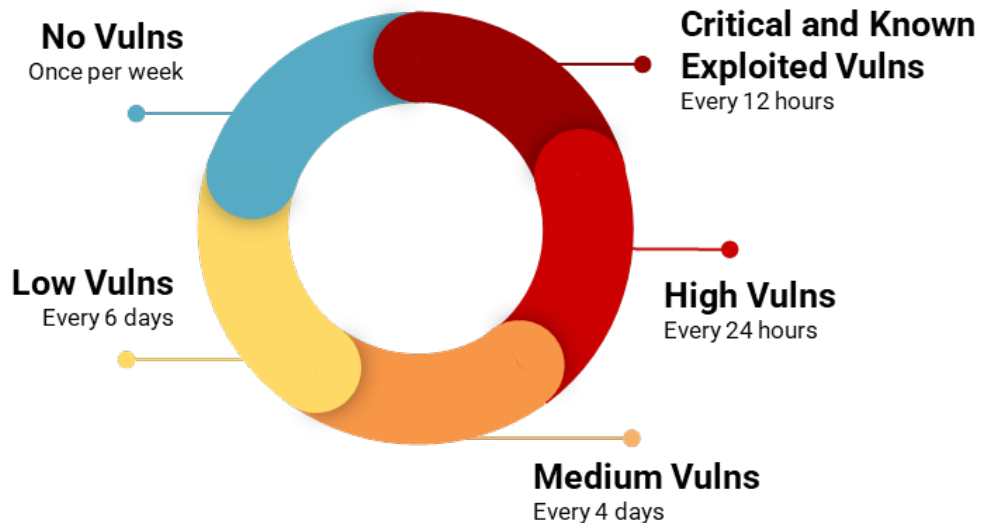
The CyHy VS Methodology



NMAP



nessus
professional



- (Nmap) – Port scanning to find open ports and listening services
- (Nessus) – Vulnerability scanning to check identified systems against a library of vulnerabilities that an Internet-based actor could exploit

Note: IPs with no open ports/listening services are port scanned only every 90 days to check for changes in host status



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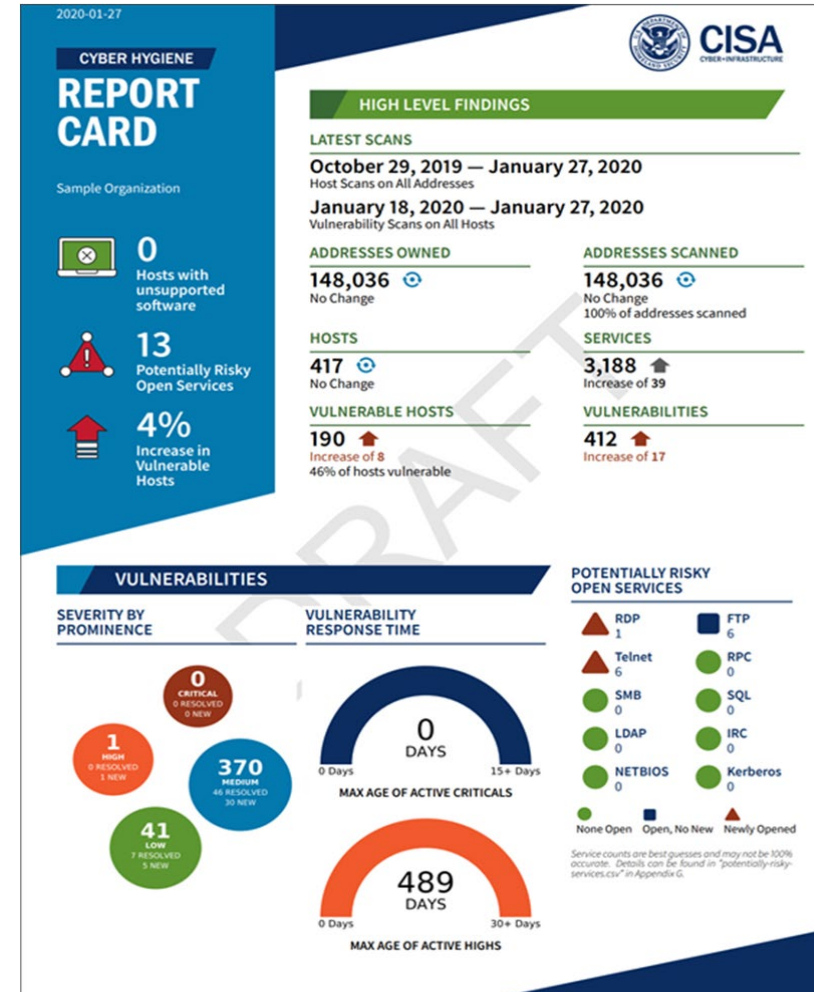
Cyber Hygiene Report Card

High Level Findings

- Latest Scans
- Addresses Owned
- Addresses Scanned
- Hosts
- Services
- Vulnerable Hosts
- Vulnerabilities

Vulnerabilities

- Severity by Prominence
- Vulnerability Response Time
- Potentially Risky Open Services





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SECURITY AGENCY**



Search



cisa.gov/uscert

[Report Cyber Issue](#)



CYBERSECURITY



INFRASTRUCTURE
SECURITY



EMERGENCY
COMMUNICATIONS



NATIONAL RISK
MANAGEMENT



ABOUT
CISA



MEDIA

KNOWN EXPLOITED VULNERABILITIES CATALOG

[Download CSV version](#)

[Download JSON version](#)

[Download JSON schema](#)

[Subscribe to the Known Exploited Vulnerabilities Catalog Update Bulletin](#)

[Back to previous page for background on known exploited vulnerabilities](#)



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Pre-Ransomware Notification Program

- Ransomware actors often take some time after gaining initial access to a target before encrypting or stealing information, a window of time that often lasts from hours to days (dwell time).
- CISA's Joint Cyber Defense Collaborative – receives tips from the cybersecurity research community, infrastructure providers, and cyber threat intelligence companies about potential early-stage ransomware activity. (report@cisa.dhs.gov)
- Local CISA field forces receive notification from our JCDC and make contact with the affected entity.
- Hundreds of notifications made weekly to Critical Infrastructure and Private Sector stakeholders:



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Ransomware Vulnerability Warning Pilot (RVWP)

A new effort to warn critical infrastructure entities that their systems have exposed vulnerabilities that may be exploited by ransomware threat actors.

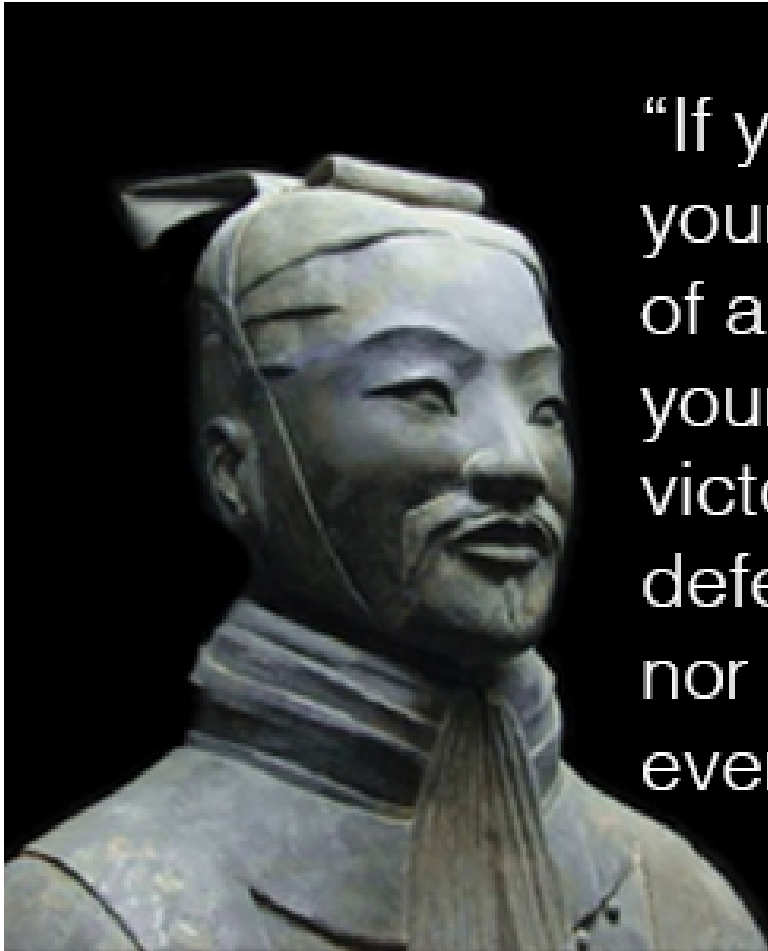
- Leverages existing authorities and technology to proactively identify information systems that contain security vulnerabilities commonly associated with ransomware attacks.

- CISA's Cyber Hygiene Vulnerability Scanning
- Known threat vectors
- Administrative Subpoena Authority
- Homeland Security Act of 2002



ASSESSMENTS

Know Thy Enemy

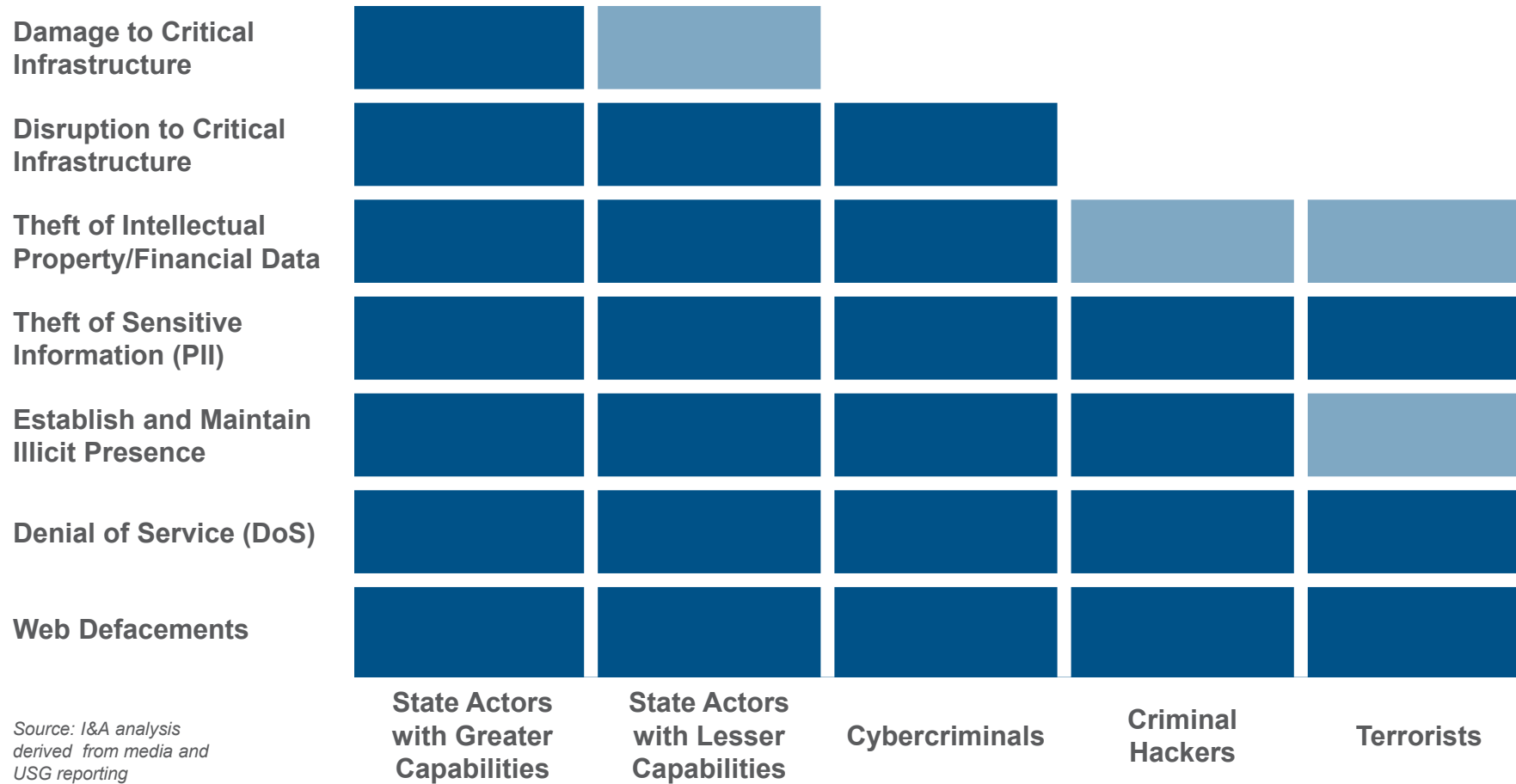


“If you know your enemy and yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle” - Sun Tzu, The Art of War



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Cyber Actor Capabilities



Source: I&A analysis derived from media and USG reporting

Note: Darker color indicates greater capability .

Cyber Criminals



Source: DHS I&A

■ Cybercriminals

- Look for targets of opportunity
- Take the path of least resistance
- Financially motivated
- Personal information and proprietary data: high value, high-demand commodities

■ Hacking as a service (HaaS) and Ransomware (RaaS)

- Malicious tools readily available for purchase or download.
- Enable less skilled actors to effectively operate

Criticality of Periodic Assessments

Periodic Assessments Are Essential for Resilience

Can't protect what you can't see

Can't fix a problem
if you don't know what's wrong



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Cybersecurity Resources and Assessments

Regional Resources:

- Cyber Resilience Review (CRR)
- External Dependencies Management (EDM)
- Cyber Infrastructure Survey (CIS)
- Cyber Incident Management Review (IMR)
- Cybersecurity Performance Goals (CPG)*
- Ransomware Readiness Assessment (RRA)*
- Workshops

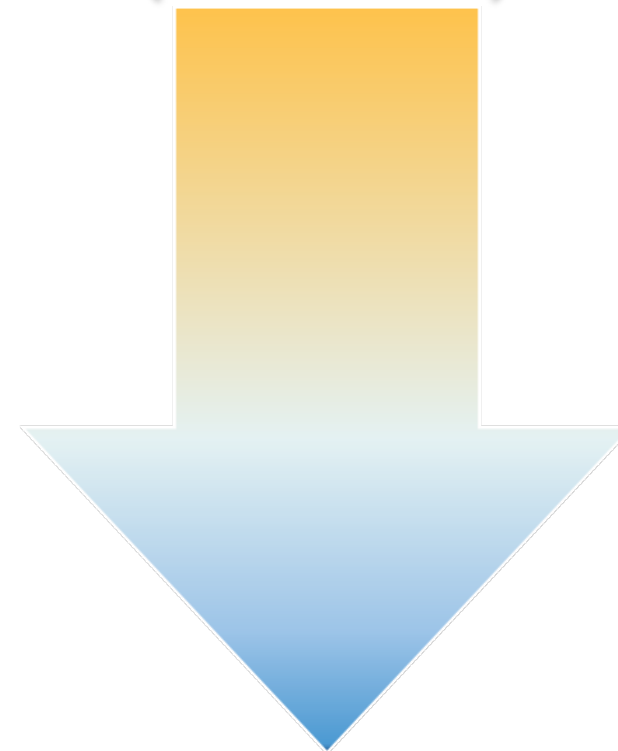
National Resources:

- Cyber Tabletop Exercises (CTTX)
[CTEP Package Documents | CISA](#)
- Vulnerability Scanning Service (CyHy)

Tools:

- [Downloading and Installing CSET | CISA](#)
- [Known Exploited Vulnerabilities Catalog | CISA](#)
- [Helping Cyber Defenders “Decide” to Use MITRE ATT&CK | CISA](#)
- [Untitled Goose Tool Fact Sheet | CISA \(Azure\)](#)

**STRATEGIC
(HIGH-LEVEL)**



**TECHNICAL
(LOW-LEVEL)**



Cyber Resilience Review

- **Purpose:** Evaluates that maturity of an organization's capacities and capabilities in performing, planning, managing, measuring, and defining cybersecurity capabilities across the following 10 domains:

Asset Management	Service Continuity Management
Controls Management	Risk Management
Configuration and Change Management	External Dependency Management
Vulnerability Management	Training and Awareness
Incident Management	Situational Awareness

- **Benefits:** Helps public and private sector partners understand and measure cybersecurity capabilities as they relate to operational resilience and cyber risk



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CYBER RESILIENCE REVIEW (CRR)

Question Set with Guidance

April 2020

U.S. Department of Homeland Security
Cybersecurity and Infrastructure Security Agency

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CROSS-SECTOR CYBERSECURITY PERFORMANCE GOALS



The CPGs are:

- Completely voluntary, but recommended - Applicable across all critical infrastructure sectors
- A **prioritized subset** of IT and operational technology (OT) cybersecurity practices to meaningfully reduce the likelihood and impact of known risks and adversary techniques
- Informed by threats observed by **CISA and its government and industry partners**
- Not Comprehensive But Very Good Starting Point – Does Not identify all cybersecurity practices to protect national and economic security and public health/safety, but captures core practices

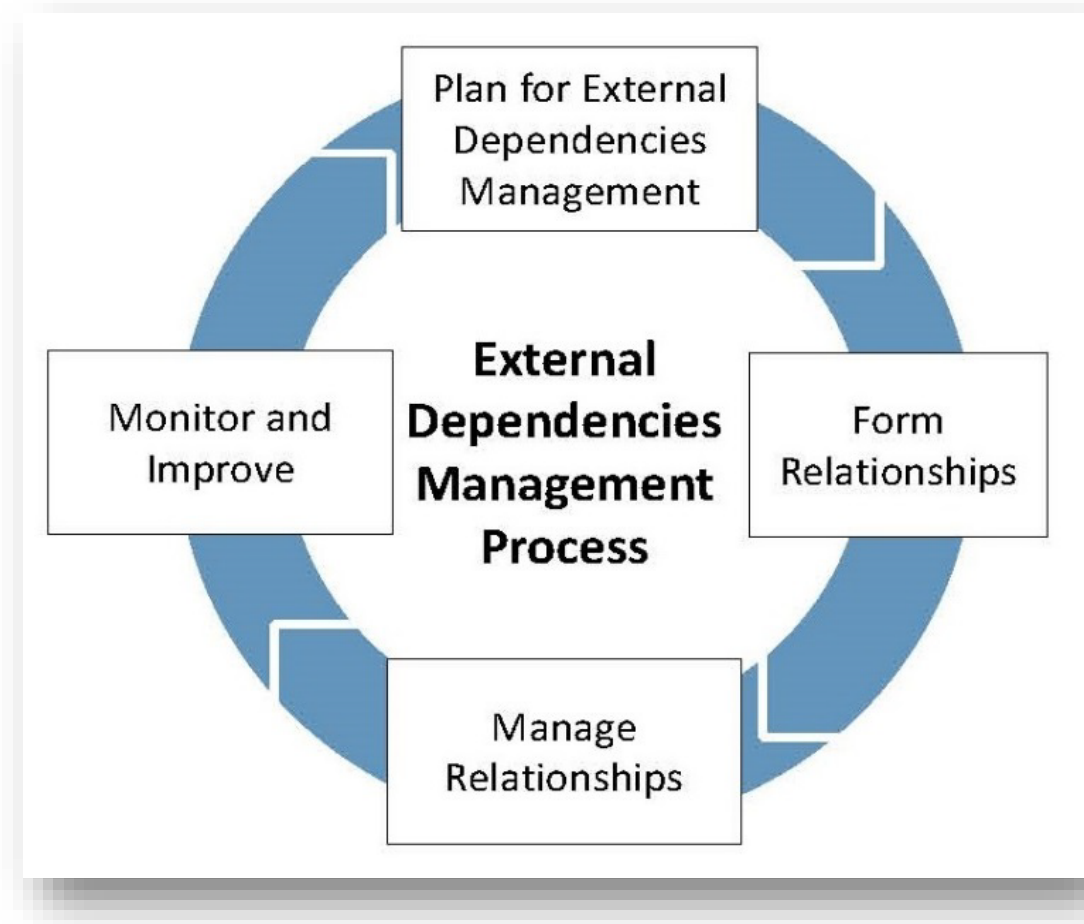


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External Dependencies Management Assessment

- **Purpose:** Evaluate an entity's management of their dependencies on third-party entities
- **Delivery:** CSC/CSA-facilitated
- **Benefits:**
 - Better understanding of the entity's cyber posture relating to external dependencies
 - Identification of improvement areas for managing third parties that support the organization



EDM Assessment Organization and Structure

- ❑ Structure and scoring similar to Cyber Resilience Review
- ❑ Also employs Maturity Indicator Level (MIL) scale across three lifecycle domains.

Relationship Formation

Assesses whether the acquirer evaluates and controls the risks of relying on external entities before entering into relationships with them.

Relationship Management and Governance

Assesses whether the acquirer manages ongoing relationships to maintain the resilience of the critical service, and mitigate dependency risk.

Service Protection and Sustainment

Assesses whether the acquirer accounts for its dependence on external entities as part of its operational activities around managing incidents, disruptions, and threats.



Ransomware Readiness Assessment (RRA)

- Voluntary Self Assessment Module of the Cybersecurity Evaluation tool (CSET)
- Helps organizations evaluate their cybersecurity posture, with respect to ransomware, against recognized standards and best practice recommendations in a systematic, disciplined, and repeatable manner.
- Guides asset owners and operators through a systematic process to evaluate their operational technology (OT) and information technology (IT) network security practices against the ransomware threat.
- Provides analysis with graphs and tables that present the assessment results in both summary and detailed form.



Cyber Security Evaluation Tool (CSET)

- **Purpose:** Standalone “no-cost” software tool that runs on desktop/laptop. Contains 49 different best practices and industry standards to help organizations identify and prioritize cybersecurity concerns.
- **Facilitated:** Self-Administered, undertaken independently
- **Benefits:**
 - Immediately available for download upon request
 - Understanding of operational technology and information technology network security practices
 - Ability to drill down on specific areas and issues
 - Helps to integrate cybersecurity into current corporate risk management strategy



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CSET Capabilities



*What CSET **CAN** do:*

- Provide a consistent means of evaluating a control system network as part of a comprehensive cybersecurity assessment
- Specify cybersecurity recommendations
- Report using standards-based information analysis
- Provide a baseline cybersecurity posture



*What CSET **CAN NOT** do:*

- Validate accuracy of user inputs
- Ensure compliance with organizational or regulatory cybersecurity policies & procedures
- Ensure implementation of cybersecurity enhancements or mitigation techniques
- Identify all known cybersecurity vulnerabilities

CSET At A Glance

CSET Tools Resource Library Help ANTHONY.CARBONE

New Assessment My Assessments

Popular Assessments

CISA Cross-Sector Cybersecurity Performance Goals (CPG) The CPGs are a prioritized subset of IT and operational technology (OT) cybersecurity practices that critical infrastructure owners and operators can...	CISA Ransomware Readiness Assessment (RRA) Ransomware poses an increasing threat and continues to rise as a top cyber threat impacting both businesses and government agencies. Ransowar...	NIST CSF: Framework for Improving Critical Infrastructure Cybersecurity v1.1 This approach is a voluntary risk-based Cybersecurity Framework – a set of industry standards and best practices to help organizations ...	Network Diagram/Components Based Assessment A Network Architecture and Diagram Based assessment. This assessment requires that you build or import an assessment into CSET and creates a ...	Land Mobile Radio Rapid Assessment (LMR) This module is designed to assist system owners in assessing key aspects of a LMR system's current cybersecurity status based on a subset of NIST SP ...
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CISA Sponsored (Resilience and Maturity)

CISA Cyber Infrastructure Survey (CIS) The CIS goal is to assess the foundational and essential cybersecurity practices of an organization's critical service to identify dependencies, capabilitie...	CISA Cyber Resilience Review (CRR) The CRR is a no-cost, voluntary, non-technical assessment to evaluate an organization's operational resilience and cybersecurity practices. The CRR m...	CISA External Dependencies Management (EDM) The External Dependencies Management (EDM) Assessment evaluates an organization's management of external dependencies. This asses...	CISA Ransomware Readiness Assessment (RRA) Ransomware poses an increasing threat and continues to rise as a top cyber threat impacting both businesses and government agencies. Ransowar...	CISA Minimum Viable Resilience Assessment (MVRA) - DRAFT MVRA assesses the critical service or services essential to the success of an organization's mission and, if disrupted, would severely impact the organiz...
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Maturity Models

Draft CMMC 2.0 w/SPRS Scorecard The new Cybersecurity Maturity Model Certification (CMMC) 2.0 streamlines the number of levels from 5 to 3. The most critical change is the removal of the ...	Cybersecurity Capability Maturity Model (C2M2) The C2M2 focuses on the implementation and management of cybersecurity practices associated with the information technology (IT) and operations ...	Cybersecurity Maturity Model Certification 1.02 The Cybersecurity Maturity Model Certification (CMMC) 1.0 measures cybersecurity maturity with five levels and aligns a set of processes and practic...
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INFORMATION SHARING



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Protected Critical Infrastructure Information Program

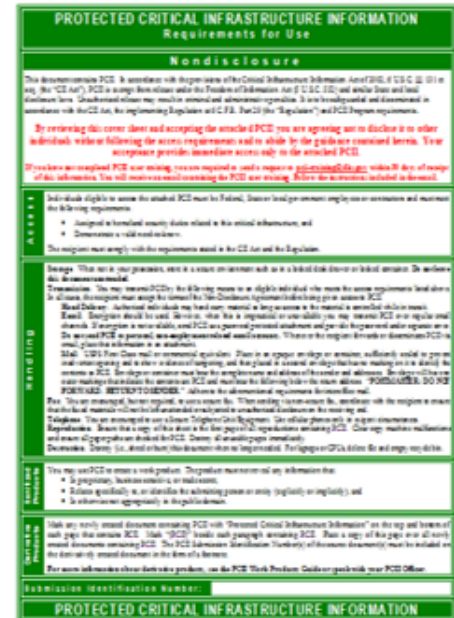
Purpose A nationwide program supporting DHS, other Federal Agencies, and SLTT governments to **encourage** critical infrastructure (CI) owners in private and SLTT sectors to **voluntarily** submit critical infrastructure information (CII) to the government.

Protections Protects Critical Infrastructure Stakeholders from the **federal government**

- Disclosing information through the Freedom of Information Act (FOIA)
- Disclosing information through State & Local Government Disclosure Laws
- Using in Civil Actions
- Using in Regulatory Proceedings

Authorities

- Critical Infrastructure Information (CII) Act of 2002
- 6 Code of Federal Regulations part 29 (2022) (Tech Edits Completed)
- PCII Program Procedures Manual (2009) (Under Review)
- DHS Management Directive 262-08, PCII Program (2016)



*The submission is protected immediately upon the federal government's receipt and throughout the validation process.

For more information on the electronic submission process, visit cisa.gov/electronic-submit-cii-pcii-protection

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Additional Information Sharing Opportunities

- **ISACs and ISAOs:**

- **Information Sharing and Analysis Centers (ISACs) or Organizations (ISAOs)** are communities of interest sharing cybersecurity risk, threat information, and incident management to members. For more information on ISACs, visit www.nationalisacs.org. For more on ISAOs visit www.isao.org/about.

- **Multi-State Information Sharing and Analysis Center:**

- Focal point for cyber threat prevention, protection, response and recovery for state, local, tribal, and territorial governments.
- Operates 24 x7 cyber security operations center, providing real-time network monitoring, early cyber threat warnings and advisories, vulnerability identification and mitigation and incident response. For more information, visit www.cisecurity.org/ms-isac or email info@msisac.org



Incident Reporting

Why report cyber incidents?

- For situational awareness
- For decision making
- Requesting response assistance

When to report a cyber incident?

If there is a suspected or confirmed cyber attack or incident that:

- Affects core or critical business functions;
- Results in the loss of data, system confidentiality, integrity, and/ or availability; or control of systems;
- Indicates malicious software is present on critical systems

Who to report cyber incidents to?

- Leadership, public affairs, legal and other internal stakeholders
- Relevant vendors
- Law enforcement and other government agencies
- Cyber insurance providers
- Appropriate 3rd party incident response teams



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Asset Response:

CISA Central - Provides Real-Time Threat Analysis and Incident Reporting Capabilities

24x7 Contact:

- Dial: 1-888-282-0870
- Email: Central@cisa.dhs.gov
- Web: www.cisa.gov/report

Threat Response (NC):

NCDIT (State) or NCEM (Local, Academic, Private)

24x7 Contact:

- NCDIT: 800-722-3946 or DITThreatManagement@nc.gov
- NCEM: 800-858-0368 or NCEOC@ncdps.gov

Threat Response (SC):

**South Carolina Law Enforcement Division
Critical Infrastructure Cybersecurity (SLED
CIC)**

Contact:

- Dial: 803-896-8181
- Email: cyber@sled.sc.gov

Cyber Incident Reporting For Critical Infrastructure Act of 2022 (CIR CIA)

- Regulatory Requirement: Requires CISA to establish a new regulatory program requiring reporting of certain cybersecurity related information:
 - **Covered entities** must report to CISA **covered cyber incidents** within 72 hours after the entity reasonably believes that a covered cyber incident occurred
 - **Covered entities** must report to CISA any ransomware payments within 24 hours of making the payment
- Requires CISA to coordinate with Federal SRMA partners on various cyber incident reporting and ransomware related activities
- CIR CIA Reports may receive information protections listed under 6 U.S.C. 681e.
- Rulemaking comment period ended on 3-July-2024.
- CIR CIA reporting requirements is not required until after the final rule issued and effective (~Q4, 2025)



ADDITIONAL CYBERSECURITY RESOURCES



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Cybersecurity & Resilience Resources

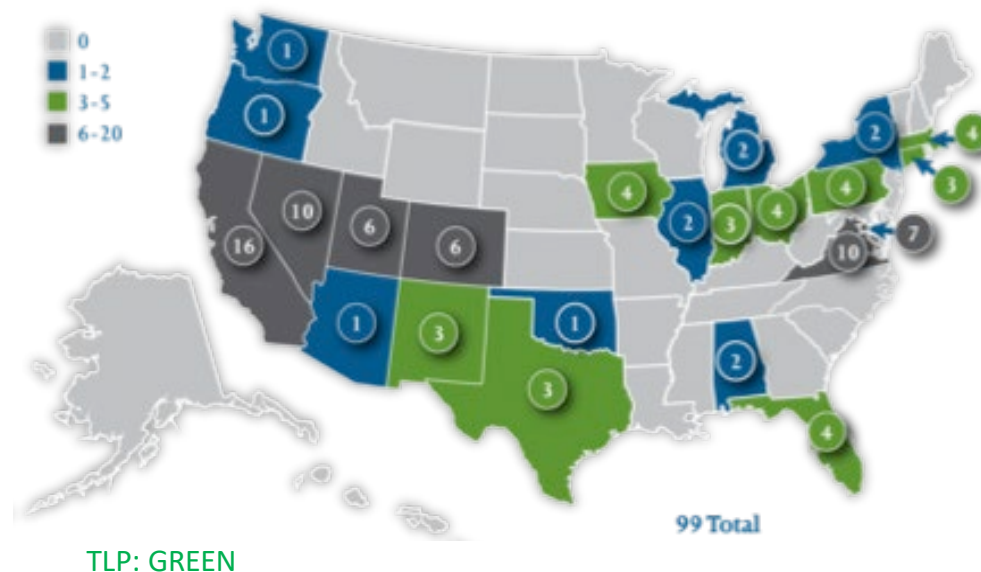


<https://www.cisa.gov/shields-up>

Cyber Exercises and Planning

CISA's National Cyber Exercise and Planning Program develops, conducts, and evaluates cyber exercises and planning activities for state, local, tribal and territorial governments and public and private sector critical infrastructure organizations.

- Cyber Storm Exercise – DHS's flagship national-level biennial exercise
- Exercise Planning and Execution
- Cyber Exercise Consulting and Subject Expertise Support
- Cyber Planning Support
- Off-the-Shelf Resources

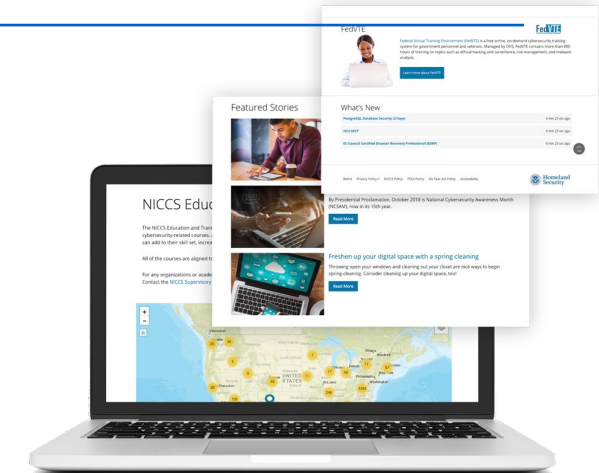


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Cybersecurity Training Resources

CISA is committed to providing the nation with access to cybersecurity training and workforce development efforts to develop an more resilient and capable cyber nation.

- [The NICCS website](#) is a searchable training catalog with over 6000 cyber-related courses offered by nationwide cybersecurity educators
 - Interactive National Cybersecurity Workforce Framework
- [FedVTE](#)
- [Scholarships for Service](#), [Centers for Academic Excellence](#), and [Cyber Competitions](#)
- [Tools and Resources for Cyber Managers](#)
- [Incident Response Training Through Identify, Mitigate, Recover \(IMR\) Series](#)
- [Industrial Control System Cybersecurity Training](#)



IDENTIFY	MITIGATE	RECOVER	
Awareness Webinars: Guidance for organizational readiness and best practices	Cyber Range Training: Skill development through step-action labs	Cyber Range Challenges: Live incident response scenarios for experienced practitioners	Observe The Attack Series: Guided red/blue team incident response demonstrations
Open to ALL levels	Open to ALL levels	Intermediate to Advanced	Beginner to Intermediate
no cap	cap ~35	cap ~50	no cap
1hr event	4hr event	8hr event	2hr event



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For More Information, Visit:
<https://www.cisa.gov/cybersecurity-training-exercises>

Our Nation's Cyber Workforce Foundation

The **National Cybersecurity Workforce Framework** is a collection of definitions that describe types of cybersecurity work and skills requires to perform it.

- ✓ When used nationally, the definitions help establish universally applicable cybersecurity skills, training/development, and curricula
- ✓ 7 Categories, 30+ Specialty Areas
- ✓ Baselines knowledge, skills, and abilities & tasks



**Operate &
Maintain**



**Securely
Provision**



Analyze



**Collect &
Operate**



**Oversight &
Development**



**Protect &
Defend**



Investigate

For more information, visit <https://www.cisa.gov/nice-cybersecurity-workforce-framework>



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No-Cost Cybersecurity Tools (Hyperlinked)

Assess Vulnerabilities:

- [Downloading and Installing CSET | CISA](#)
- [Known Exploited Vulnerabilities Catalog | CISA](#)

Hardening:

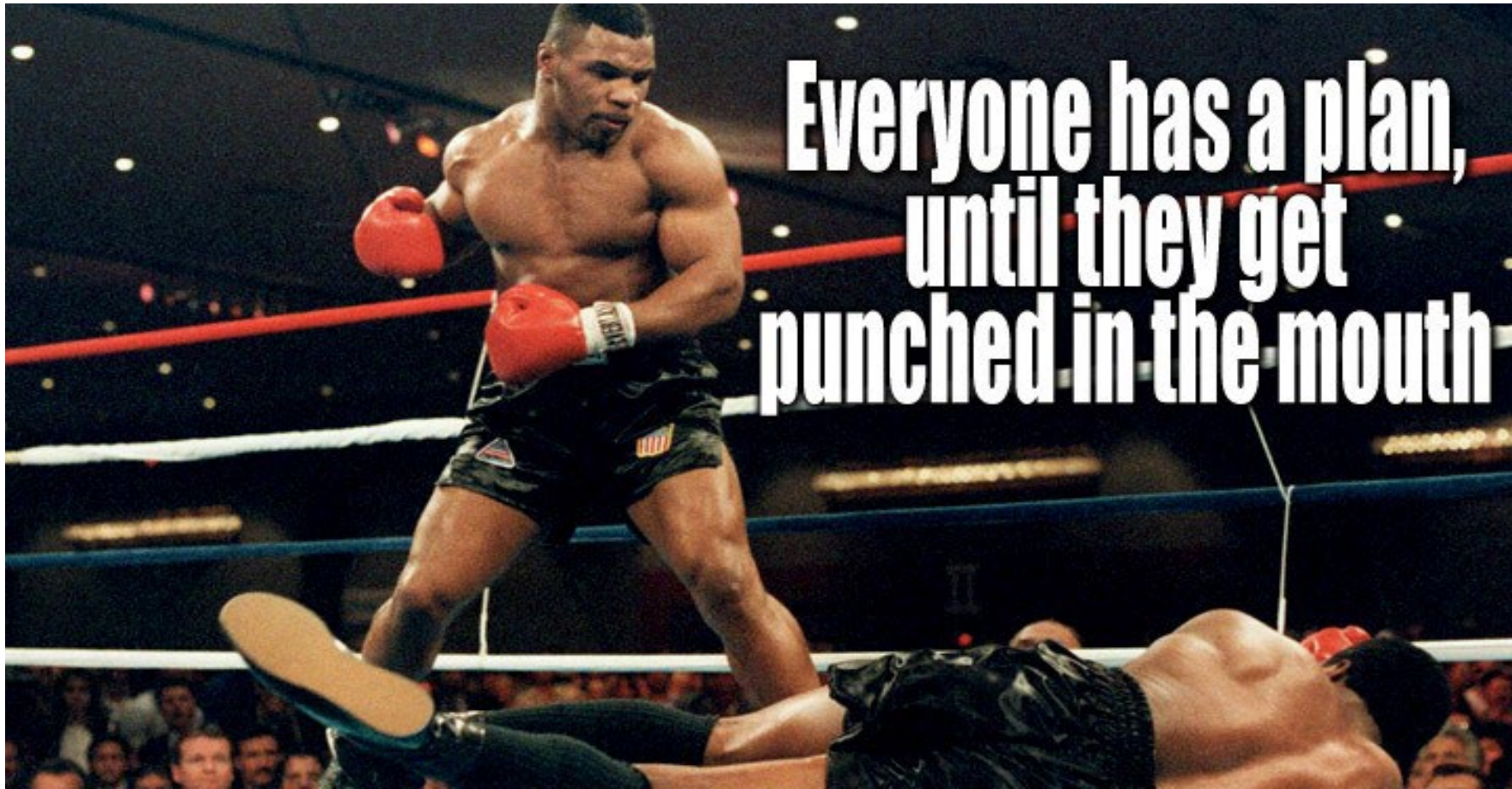
- [CIS Benchmarks \(cisecurity.org\)](#)
- [GitHub - decalage2/awesome-security-hardening: A collection of awesome security hardening guides, tools and other resources](#)
- [Secure Cloud Business Applications \(SCuBA\) Project | CISA](#)
 - [GitHub - cisagov/ScubaGear: Automation to assess the state of your M365 tenant against CISA's baselines](#)
 - <https://www.cisa.gov/sites/default/files/publications/SCuBA TRA RFC EG 508c.pdf>

Cyber Defense:

- [Helping Cyber Defenders “Decide” to Use MITRE ATT&CK | CISA](#)
- [Untitled Goose Tool Fact Sheet | CISA \(Azure\)](#)
- [CISA Releases RedEye: Red Team Campaign Visualization and Reporting Tool | CISA](#)
- [CISA Red Team Shares Key Findings to Improve Monitoring and Hardening of Networks | CISA](#)



Bottom Line



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Contact



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CISA Resource Hub

<https://www.cisa.gov/cyber-resource-hub>



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CSC Rob Main
CAO October 8, 2024

Questions / Next Step



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