Protecting Controlled Unclassified Information

Project Update

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
U.S. DEPARTMENT OF COMMERCE

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Agenda

https://csrc.nist.gov/projects/protecting-CUI

Protecting CUI Series at a Glance

Change Overview: SP 800-171 Rev 3 and SP 800-171A Rev 3

Looking Ahead for the CUI Series

Contact Information and Q&A

Protecting CUI Series at a Glance

SECURITY REQUIREMENTS
FOR PROTECTING THE CONFIDENTIALITY OF CUI

NONFEDERAL
SYSTEMS & ORGANIZATIONS

PROCESSING, STORING, OR TRANSMITTING
CUI

TAILORED FROM THE SP 800-53B
MODERATE
BASELINE

INTERNATIONAL
USE & IMPACT

NEW & IMPROVED
SUPPLEMENTAL RESOURCES

ASSESSMENT PROCEDURES
SP 800-171A

ENHANCED SECURITY REQUIREMENTS
SP 800-172

ASSESSMENT PROCEDURES FOR ENHANCED SECURITY REQUIREMENTS
SP 800-172A

Change Overview: SP 800-171 Rev 3

Improved Readability

- Streamlined “Introduction” and “The Fundamentals” sections
- Added Appendix for ODPs

Updated Tailoring Criteria

- Added new tailoring categories: NA and ORC
- Eliminated NFO tailoring category
- Recategorized selected controls from SP 800-53B moderate baseline

Updated Security Requirements

- Added, deleted, or changed security requirements to reflect controls & families in SP 800-53 Rev 5 and moderate baseline in 800-53B
- Eliminated distinction between basic and derived requirements
- Increased specificity and grouped requirements
- Introduced organization-defined parameters (ODPs)
- Removed outdated and redundant requirements
- Further tailored discussions to focus on CUI

Added Supplemental Resources

- Developed CUI Overlay using tailored controls in SP 800-53 Rev 5
- Created transition mapping tables and analysis of changes between SP 800-171 Rev 2 and SP 800-171 Rev 3
- Developed updated FAQ
- Concurrently issued updated security requirements through Cybersecurity and Privacy Reference Tool

SP 800-171 Rev 2 withdrawn: May 14, 2024

Updated Security Requirements

- ✓ Updated security requirement **structure**; added leading 0s to requirements
- ✓ Included **organization-defined parameters** (ODP) in certain requirements
  - ODPs can use assignment and/or selection operations
- ✓ Updated **discussion sections** to focus on CUI
- ✓ Included direct link to **source** SP 800-53 controls

New requirement structure

03.13.11 Cryptographic Protection

Implement the following types of cryptography to protect the confidentiality of CUI: [*Assignment: organization-defined types of cryptography*].

New ODP

DISCUSSION

Cryptography is implemented in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, and guidelines. FIPS-validated cryptography is recommended for the protection of CUI.

REFERENCES

Source Control: SC-13

SP 800-53 Source

Supporting Publications: FIPS 140-3 [38]

Updated Tailoring Criteria

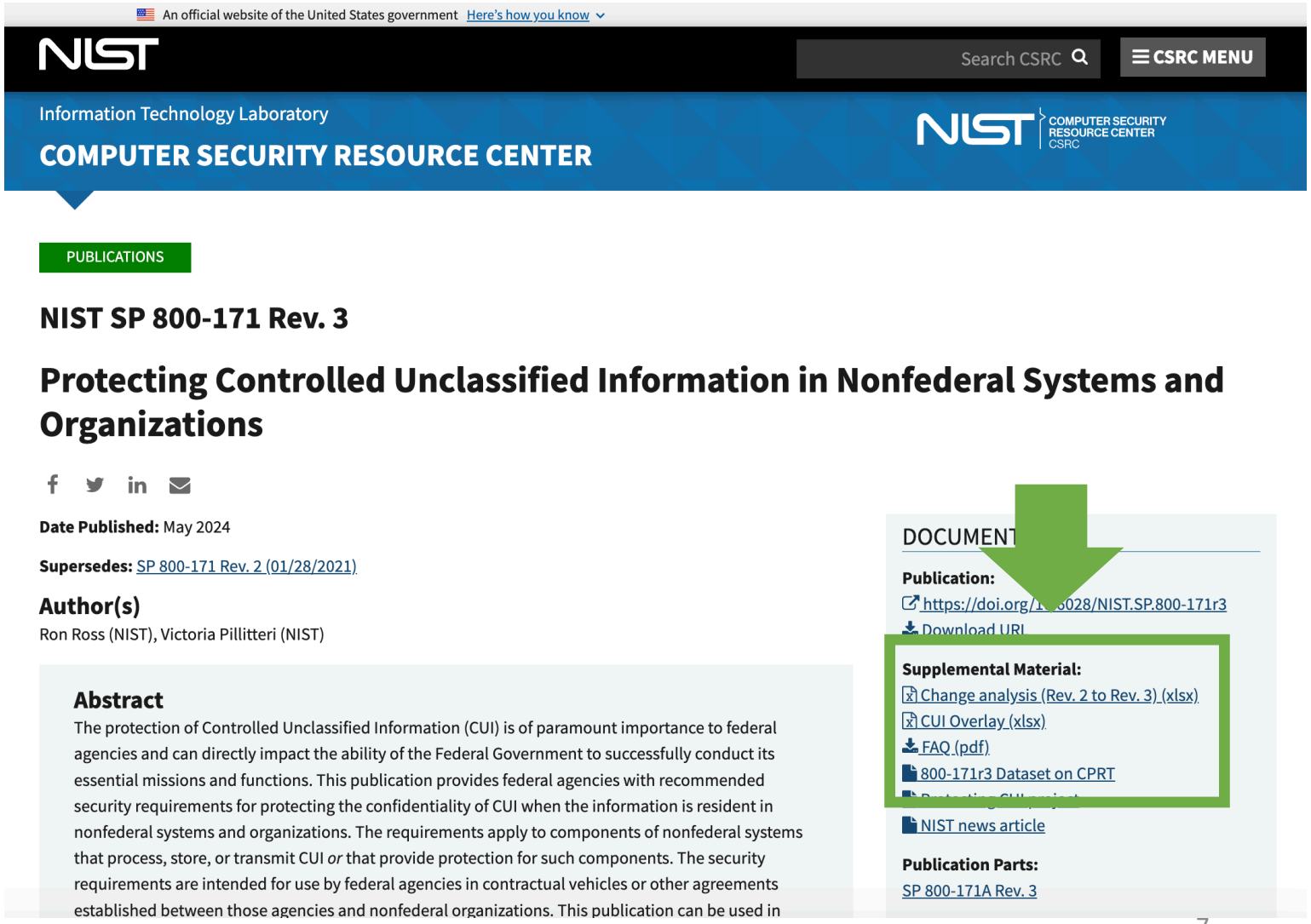
Tailoring Symbol	Tailoring Criteria	SP 800-53 Rev 4 Moderate Baseline → SP 800-171 Rev 2	SP 800-53 Rev 5 / 800-53B Moderate Baseline → SP 800-171 Rev 3
NCO	Not directly related to protecting the confidentiality of CUI	58	96
NFO	Expected to be implemented by nonfederal organizations without specification	61	0
FED	Primarily the responsibility of the Federal Government	18	22
CUI	Directly related to protecting the confidentiality of CUI	125	156
ORC	The outcome of the control relating to the protection of confidentiality of CUI is adequately covered by other related controls.	New in FPD SP 800-171 Rev 3	13
NA	Not Applicable	New in IDP SP 800-171 Rev 3	50
[SP 800-53] Moderate Baseline Security Controls		**262**	**287**

- ✓ New tailoring categories: NA and ORC
- ✓ Removed tailoring category: NFO
- ✓ Recategorized selected controls from SP 800-53B moderate baseline
- ✓ Overall, fewer security requirements

Added Supplemental Resources

- ✓ FAQ
- ✓ Transition Mapping Tables / Change Analysis
- ✓ Prototype CUI Overlay
- ✓ Link to CPRT Dataset

https://csrc.nist.gov/pubs/sp/800/171/r3/final



Added Supplemental Resources

Prototype CUI Overlay

Unique Sort ID (800-53r5)	SP 800-53 Rev 5 Control & Control Enhancement	Tailoring Decision	Unique Sort ID (800-171r3)	SP 800-171 Rev 3 Security Requirement	Additional Tailoring
IA-12-03-00	**IA-12(03) Identity Proofing | Identity Evidence Validation and Verification**	**FED**		—	
IA-12-03-01	Require that the presented identity evidence be validated and verified through [Assignment: organizational defined methods of validation and verification].	FED		—	
IA-12-05-00	**IA-12(05) Identity Proofing | Address Confirmation**	**FED**		—	
IA-12-05-01	Require that a [Selection: registration code; notice of proofing] be delivered through an out-of-band channel to verify the users address (physical or digital) of record.	FED		—	
IR-01-00-02	**IR-01 Policy and Procedures**	**CUI**	**03-15-01:**	**03.15.01 Policy and Procedures**	
IR-01-00-03	a. Develop, document, and disseminate to [Assignment: organization-defined personnel or roles]:	CUI	03-15-01a.	03.15.01.a. Develop, document, and disseminate to organizational personnel or roles the policies and procedures needed to satisfy the security requirements for the protection of CUI.	Addresses all policy (instead of only incident response policy) Removed ODP to assign "personnel or roles"
IR-01-00-04	1. [Selection (one or more): organization-level; mission/business process-level; system-level] incident response policy that:	CUI	03-	03.15.01.a. D personnel or qu	select one or more "organization-siness process-level; system level"
IR-01-00-05	(a) Addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and	NCO		—	
IR-01-00-06	(b) Is consistent with applicable laws, executive orders, directives, regulations, policies, standards, and guidelines; and	NCO		—	
IR-01-00-07	2. Procedures to facilitate the implementation of the incident response policy and the associated incident response controls;	CUI	03-15-01a.	03.15.01.a. Develop, document, and disseminate to organizational personnel or roles the policies and procedures needed to satisfy the security requirements for the protection of CUI.	Addresses all procedures (instead of only incident response procedures)
IR-01-00-08	b. Designate an [Assignment: organization-defined official] to manage the development, documentation, and dissemination of the incident response policy and procedures; and	NCO		—	
IR-01-00-09	c. Review and update the current incident response:	CUI	03-15-01b.	03.15.01b. Review and update policies and procedures periodically.	Addresses update of all policy and procedures (instead of only incident response)
IR-01-00-10	1. Policy [Assignment: organization-defined frequency] and following [Assignment: organization-defined events]; and	CUI	03-15-01b.	03.15.01b. Review and update policies and procedures periodically.	Removed ODPs to assign "frequency" and "events"
IR-01-00-11	2. Procedures [Assignment: organization-defined frequency] and following [Assignment: organization-defined events].	CUI	03-15-01b.	03.15.01b. Review and update policies and procedures periodically.	Removed ODPs to assign "frequency" and "events"

✓ Filter and Sort by Column

✓ Tailoring decisions at control- and requirement—item level

Change Overview: SP 800-171A Rev 3

Improved Readability

- Updated “Introduction” and “The Fundamentals” sections
- Made version number update to align with SP 800-171 Rev 3
- Added Appendix for ODPs

SP 800-171A withdrawn: May 14, 2024

Updated Assessment Procedures

- Restructured assessment procedure syntax to align with SP 800-53A Rev 5
- Included ODPs (consistent with SP 800-171 security requirements)
- Provided additional guidance on assessment methodology

Added Supplemental Resources

- Delivered SP 800-171A assessment procedures in spreadsheet format
- Concurrently issued updated assessment procedures through Cybersecurity and Privacy Reference Tool

Updated Assessment Procedures

SP 800-171

03.01.10 Device Lock

a. Prevent access to the system by [Selection (one or more): initiating a device lock after [Assignment: organization-defined time period] of inactivity; requiring the user to initiate a device lock before leaving the system unattended].

b. Retain the device lock until the user reestablishes access using established identification and authentication procedures.

c. Conceal, via the device lock, information previously visible on the display with a publicly viewable image.

DISCUSSION

Device locks are temporary actions taken to prevent access to the system when users depart from the immediate vicinity of the system but do not want to log out due to the temporary nature of their absences. Device locks can be implemented at the operating system level or application level. User-initiated device locking is behavior- or policy-based and requires users to take physical action to initiate the device lock. Device locks are not an acceptable substitute for logging out of the system (e.g., when organizations require users to log out at the end of workdays). Publicly viewable images can include static or dynamic images, such as patterns used with screen savers, solid colors, photographic images, a clock, a battery life indicator, or a blank screen with the caveat that controlled unclassified information is not displayed.

REFERENCES

Source Controls: AC-11, AC-11(01)
Supporting Publications: None

SP 800-171A

03.01.10 Device Lock

ASSESSMENT OBJECTIVE

Determine if:

A.03.01.10.ODP[01]: one or more of the following PARAMETER VALUES are selected: {a device lock is initiated after <A.03.01.10.ODP[02]: time period> of inactivity; the user is required to initiate a device lock before leaving the system unattended}.

A.03.01.10.ODP[02]: the time period of inactivity after which a device lock is initiated is defined (if selected).

A.03.01.10.a: access to the system is prevented by **<A.03.01.10.ODP[01]: SELECTED PARAMETER VALUES>.**

A.03.01.10.b: the device lock is retained until the user reestablishes access using established identification and authentication procedures.

A.03.01.10.c: information previously visible on the display is concealed via device lock with a publicly viewable image.

ASSESSMENT METHODS AND OBJECTS

Examine

[SELECT FROM: access control policy and procedures; procedures for session lock… other relevant documents or records]

Interview

[SELECT FROM: personnel with responsibilities for cryptographic key establishment and/or management; personnel with information security responsibilities; system administrators]

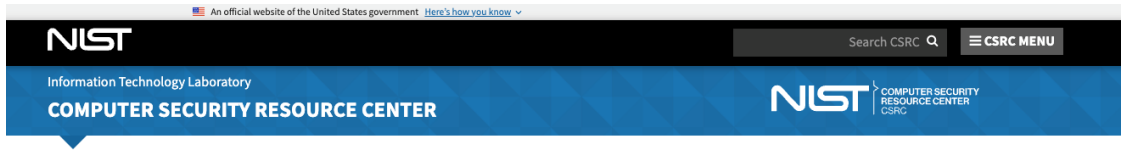
Test

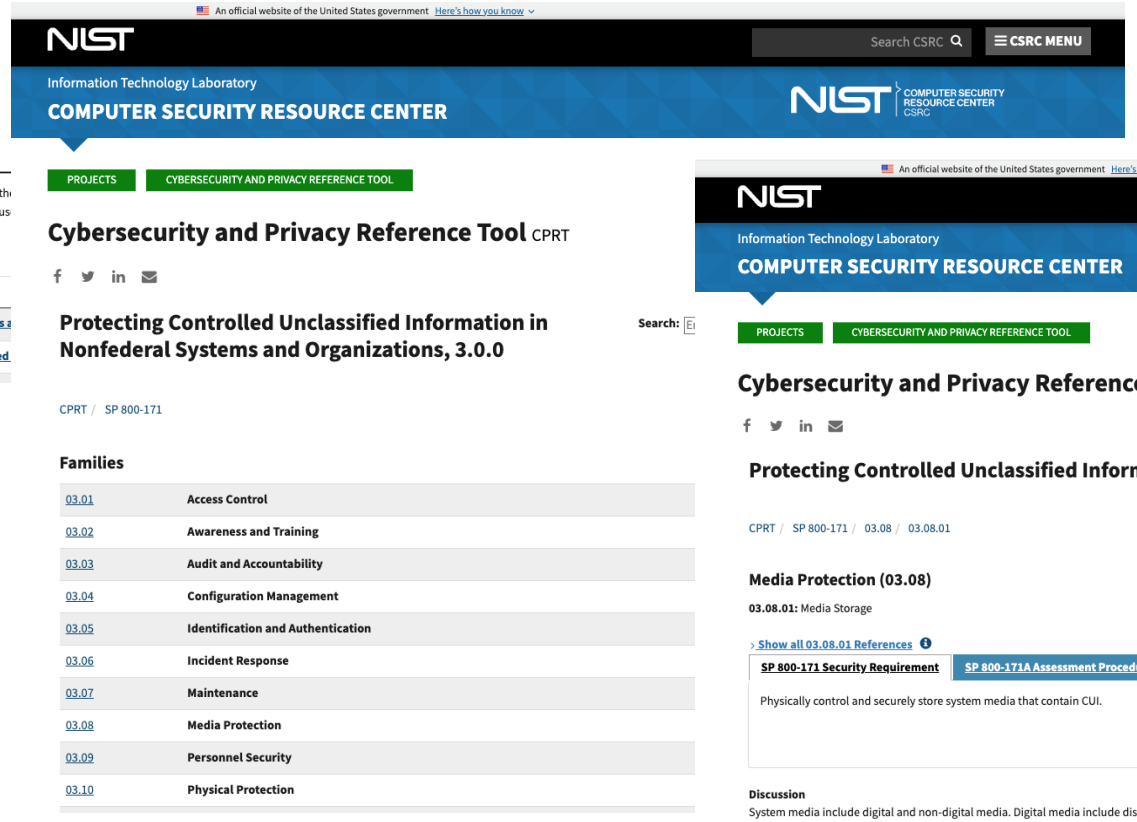
[SELECT FROM: mechanisms for implementing the access control policy for session lock; session lock mechanisms]

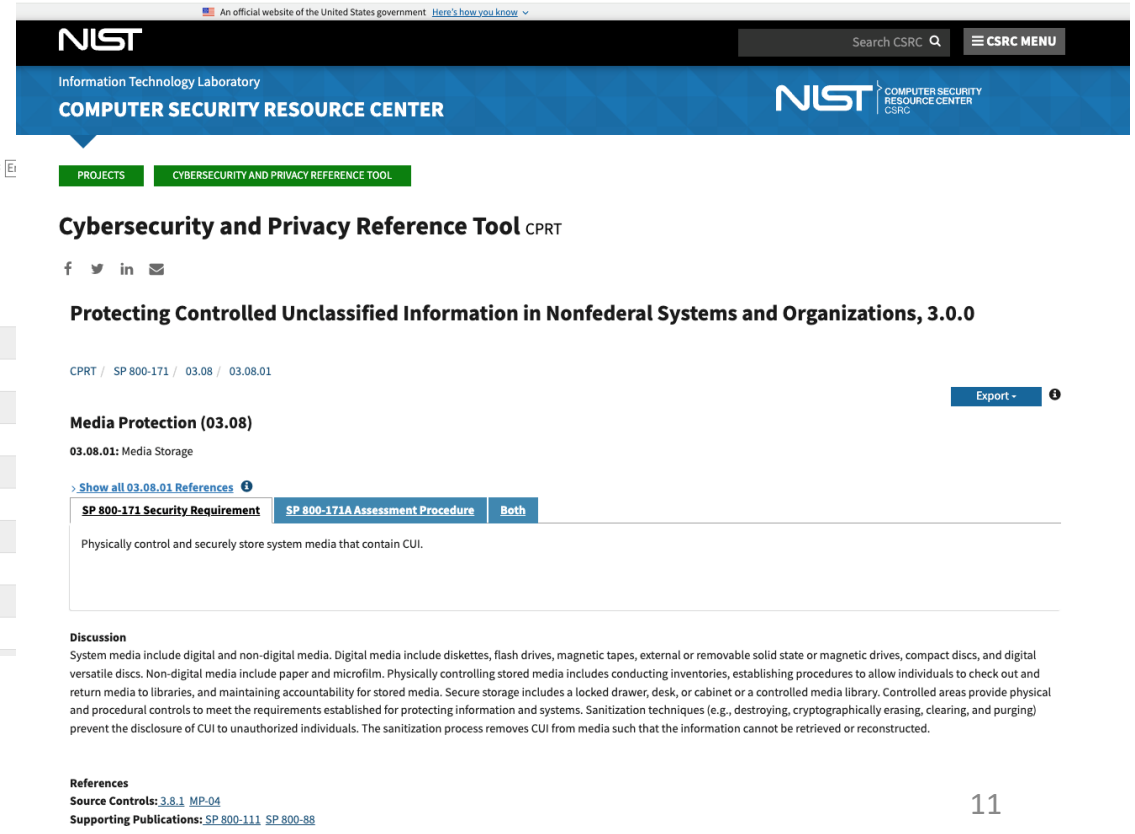
REFERENCES

Source Assessment Procedures: AC-11, AC-11(01)

SP 800-171 and SP 800-171 Datasets







https://csrc.nist.gov/Projects/cprt/catalog#/cprt/home

Looking Ahead for the CUI Series

- ✓ **Revise SP 800-172 and SP 800-172A**
- ✓ **Follow the same development strategy as SP 800-171, Revision 3**
- ✓ **Projected development schedule**
  - NIST SP 800-172, R1 (Initial Public Draft) – CY2024
  - NIST SP 800-172, R1 (Final Public Draft) – CY2025
  - NIST SP 800-172A, R1 (Initial Public Draft) – CY2025
  - NIST SP 800-172, R1 (Final) – CY2025
  - NIST SP 800-172A, R1 (Final) – CY2025

Approved for Public Release

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STAY IN TOUCH

CONTACT US

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