

# What's New in SP 800-53A Revision 5



- Each 800-53 publication provides guidance for implementing specific steps in the RMF.
  - SP 800-53 and SP 800-53B: address the **Select** step of the RMF and provide guidance on security and privacy control selection (i.e., determining the controls needed to manage risks to organizational operations and assets, individuals, other organizations, and the Nation).
  - SP 800-53A addresses the **Assess** and **Monitor** steps of the RMF and provides guidance on the security and privacy control assessment processes.

# Overview: NIST SP 800-53A Revision 5



**Purpose:** To facilitate (SP 800-53) control assessments within an effective risk management framework

1. Process to conduct effective control assessments (Prepare, Develop Plans, Conduct Assessments, Analyze Results)
2. (Initial) assessment procedures that correspond with SP 800-53 Rev 5 controls

## SP 800-53 control assessments:



Determine overall effectiveness of implemented controls



Indication of quality of risk management process



Information about security & privacy strengths/weaknesses of the system/organization



Checklist for compliance



Simple pass/fail results



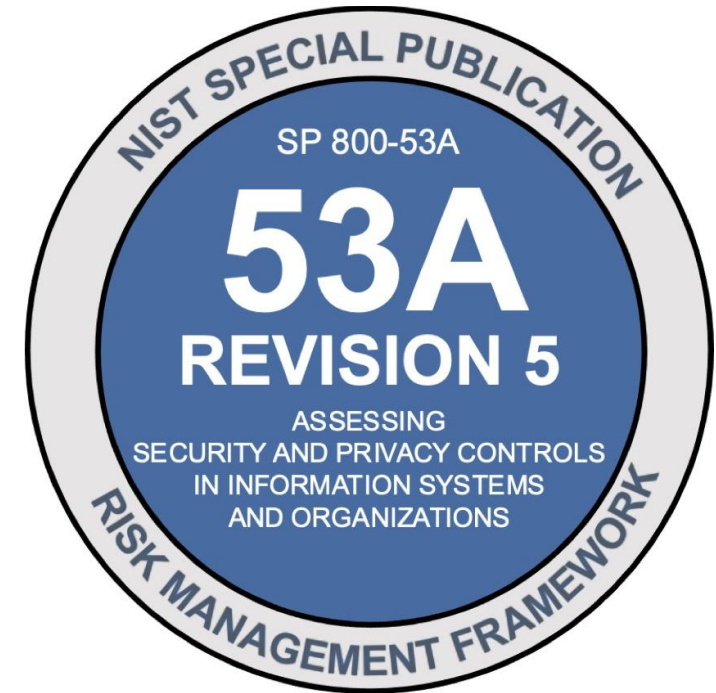
Paperwork exercise to pass inspections/audits

# What's new in NIST SP 800-53A Revision 5



NIST SP 800-53A, Revision 5 includes:

- Updated guidance on the **process to assess controls effectively** (front matter)
- **Updated assessment procedures** to correspond with SP 800-53, Rev 5 controls
  - First-ever procedures for privacy controls
- **New assessment procedure structure to:**
  - Provide better traceability between assessment procedures & controls
  - Improve the efficiency of conducting control assessments
  - Better support the use of automated tools, continuous monitoring, and ongoing authorization programs
- **Assessment procedures in multiple data formats:** CSV, plain text, and OSCAL (XML, YAML, JSON)



NIST SP 800-53A, Revision 5  
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# Control Assessment Process

NIST SP 800-53A provides a repeatable process to **prepare** for, **develop plans** for, and **conduct** control assessments, and **analyze** assessment results as part of a risk management process



Each Step (Prepare, Develop, Conduct, Analyze) includes:

*Purpose* ♦ *Primary and Supporting Roles* ♦ Outcomes ♦ In-depth Tasks and Guidance

# Sample SP 800-53A Assessment Procedure: Revision 4 vs. Revision 5



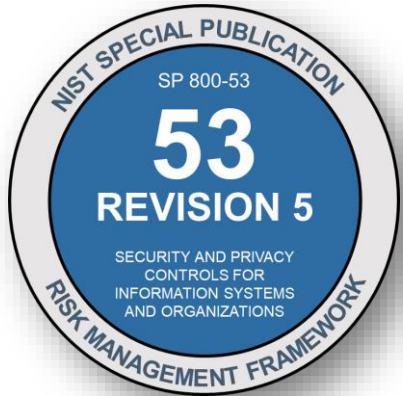
## SP 800-53A Rev 4 (2014)

AC-16	SECURITY ATTRIBUTES			
	<b>ASSESSMENT OBJECTIVE:</b> <i>Determine if the organization:</i>			
	AC-16(a)	AC-16(a)[1]	<i>defines types of security attributes to be associated with information:</i>	
			AC-16(a)[1][a]	<i>in storage;</i>
			AC-16(a)[1][b]	<i>in process; and/or</i>
			AC-16(a)[1][c]	<i>in transmission;</i>
		AC-16(a)[2]	<i>defines security attribute values for organization-defined types of security attributes;</i>	
		AC-16(a)[3]	<i>provides the means to associate organization-defined types of security attributes having organization-defined security attribute values with information:</i>	
			AC-16(a)[3][a]	<i>in storage;</i>
			AC-16(a)[3][b]	<i>in process; and/or</i>
			AC-16(a)[3][c]	<i>in transmission;</i>
	AC-16(b)	<i>ensures that the security attribute associations are made and retained with the information;</i>		
	AC-16(c)	AC-16(c)[1]	<i>defines information systems for which the permitted organization-defined security attributes are to be established;</i>	
		AC-16(c)[2]	<i>defines security attributes that are permitted for organization-defined information systems;</i>	
		AC-16(c)[3]	<i>establishes the permitted organization-defined security attributes for organization-defined information systems;</i>	
	AC-16(d)	AC-16(d)[1]	<i>defines values or ranges for each of the established security attributes; and</i>	
		AC-16(d)[2]	<i>determines the permitted organization-defined values or ranges for each of the established security attributes.</i>	
<b>POTENTIAL ASSESSMENT METHODS AND OBJECTS:</b>				
<b>Examine:</b> [SELECT FROM: Access control policy; procedures addressing the association of security attributes to information in storage, in process, and in transmission; information system design documentation; information system configuration settings and associated documentation; information system audit records; other relevant documents or records].				
<b>Interview:</b> [SELECT FROM: System/network administrators; organizational personnel with information security responsibilities; system developers].				
<b>Test:</b> [SELECT FROM: Organizational capability supporting and maintaining the association of security attributes to information in storage, in process, and in transmission].				

## SP 800-53A Rev 5 (2022)

AC-16	SECURITY AND PRIVACY ATTRIBUTES	
	ASSESSMENT OBJECTIVE	
	Determine if:	
	AC-16_ODP[01]	types of security attributes to be associated with information security attribute values for information in storage, in process, and/or in transmission are defined;
	AC-16_ODP[02]	types of privacy attributes to be associated with privacy attribute values for information in storage, in process, and/or in transmission are defined;
	AC-16_ODP[03]	security attribute values for types of security attributes are defined;
	AC-16_ODP[04]	privacy attribute values for types of privacy attributes are defined;
	AC-16_ODP[05]	systems for which permitted security attributes are to be established are defined;
	AC-16_ODP[06]	systems for which permitted privacy attributes are to be established are defined;
	AC-16_ODP[07]	security attributes defined as part of AC-16a that are permitted for systems are defined;
	AC-16_ODP[08]	privacy attributes defined as part of AC-16a that are permitted for systems are defined;
	AC-16_ODP[09]	attribute values or ranges for established attributes are defined;
	AC-16_ODP[10]	the frequency at which to review security attributes for applicability is defined;
	AC-16_ODP[11]	the frequency at which to review privacy attributes for applicability is defined;
	AC-16a.[01]	the means to associate <AC-16_ODP[01] types of security attributes> with <AC-16_ODP[03] security attribute values> for information in storage, in process, and/or in transmission are provided;
	AC-16a.[02]	the means to associate <AC-16_ODP[02] types of privacy attributes> with <AC-16_ODP[04] privacy attribute values> for information in storage, in process, and/or in transmission are provided;
	AC-16b.[01]	attribute associations are made;
	AC-16b.[02]	attribute associations are retained with the information;
	AC-16c.[01]	the following permitted security attributes are established from the attributes defined in AC-16a. for <AC-16_ODP[05] systems>: <AC-16_ODP[07] security attributes>;
	AC-16c.[02]	the following permitted privacy attributes are established from the attributes defined in AC-16a. for <AC-16_ODP[06] systems>: <AC-16_ODP[08] privacy attributes>;
	AC-16d.	the following permitted attribute values or ranges for each of the established attributes are determined: <AC-16_ODP[09] attribute values or ranges>;
	AC-16e.	changes to attributes are audited;
	AC-16f.[01]	<AC-16_ODP[07] security attributes> are reviewed for applicability <AC-16_ODP[10] frequency>;
	AC-16f.[02]	<AC-16_ODP[08] privacy attributes> are reviewed for applicability <AC-16_ODP[11] frequency>.
	POTENTIAL ASSESSMENT METHODS AND OBJECTS:	
	AC-16 Examine	[SELECT FROM: Access control policy; procedures addressing the association of security and privacy attributes to information in storage, in process, and in transmission; system design documentation; system configuration settings and associated documentation; system audit records; system security plan; privacy plan; other relevant documents or records].
	AC-16 Interview	[SELECT FROM: System/network administrators; organizational personnel with information security and privacy responsibilities; system developers].
	AC-16 Test	[SELECT FROM Organizational capability supporting and maintaining the association of security and privacy attributes to information in storage, in process, and in transmission].

# Assessment Procedure Schema: Relationship between 53 and 53A



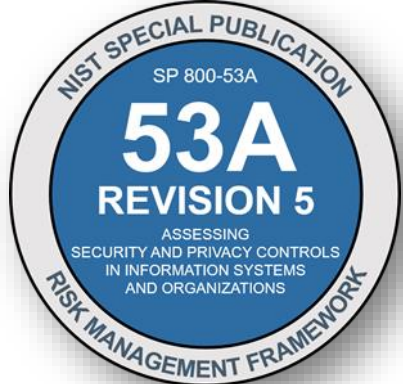
## PT-3

### PERSONALLY IDENTIFIABLE INFORMATION PROCESSING PURPOSES

#### Control:

- Identify and document the [Assignment: organization-defined purpose(s)] for processing personally identifiable information;
- Describe the purpose(s) in the public privacy notices and policies of the organization;
- Restrict the [Assignment: organization-defined processing] of personally identifiable information to only that which is compatible with the identified purpose(s); and
- Monitor changes in processing personally identifiable information and implement [Assignment: organization-defined mechanisms] to ensure that any changes are made in accordance with [Assignment: organization-defined requirements].

PT-03	PERSONALLY IDENTIFIABLE INFORMATION PROCESSING PURPOSES	
	<b>ASSESSMENT OBJECTIVE:</b> <i>Determine if:</i>	
	PT-03a.	the <PT-03_ODP[01] purpose(s)> for processing personally identifiable information is/are identified and documented;
	PT-03b.[01]	the purpose(s) is/are described in the public privacy notices of the organization;
	PT-03b.[02]	the purpose(s) is/are described in the policies of the organization;
	PT-03c.	the <PT-03_ODP[02] processing> of personally identifiable information are restricted to only that which is compatible with the identified purpose(s);
	PT-03d.[01]	changes in the processing of personally identifiable information are monitored;
	PT-03d.[02]	<PT-03_ODP[03] mechanisms> are implemented to ensure that any changes are made in accordance with <PT-03_ODP[04] requirements>.



# Assessment Procedure Schema: Controls

	PT-03	PERSONALLY IDENTIFIABLE INFORMATION PROCESSING PURPOSES	
Assessment Objectives		ASSESSMENT OBJECTIVE: <i>Determine if:</i>	
		PT-03_ODP[01]	<i>the purpose(s) for processing personally identifiable information is/are defined;</i>
		PT-03_ODP[02]	<i>the processing of personally identifiable information to be restricted is defined;</i>
		PT-03_ODP[03]	<i>mechanisms to be implemented for ensuring any changes in the processing of personally identifiable information are made in accordance with requirements are defined;</i>
		PT-03_ODP[04]	<i>requirements for changing the processing of personally identifiable information are defined;</i>
Corresponds directly with SP 800-53 control item		PT-03a.	the <PT-03_ODP[01] purpose(s)> for processing personally identifiable information is/are identified and documented;
		PT-03b.[01]	the purpose(s) is/are described in the public privacy notices of the organization;
Bracketed numbers indicates granularization from the SP 800-53 control item.		PT-03b.[02]	the purpose(s) is/are described in the policies of the organization;
		PT-03c.	the <PT-03_ODP[02] processing> of personally identifiable information are restricted to only that which is compatible with the identified purpose(s);
		PT-03d.[01]	changes in the processing of personally identifiable information are monitored;
		PT-03d.[02]	<PT-03_ODP[03] mechanisms> are implemented to ensure that any changes are made in accordance with <PT-03_ODP[04] requirements>.
Potential Methods & Objects		POTENTIAL ASSESSMENT METHODS AND OBJECTS:	
Control ID “Tag” for Potential Methods		PT-03-Examine	[SELECT FROM: Personally identifiable information processing and transparency policy and procedures; configuration management plan; organizational privacy notices; organizational policies; Privacy Act statements; computer matching notices; applicable Federal Register notices; documented requirements for enforcing and monitoring the processing of personally identifiable information; privacy plan; other relevant documents or records].

# Assessment Procedure Schema: Organization-Defined Parameters (ODP)

Organization-defined  
Parameters “unique ID”

PT-03	PERSONALLY IDENTIFIABLE INFORMATION PROCESSING PURPOSES	
	<b>ASSESSMENT OBJECTIVE:</b> <i>Determine if:</i>	
	PT-03_ODP[01]	<i>the purpose(s) for processing personally identifiable information is/are defined;</i>
	PT-03_ODP[02]	<i>the processing of personally identifiable information to be restricted is defined;</i>
	PT-03_ODP[03]	<i>mechanisms to be implemented for ensuring any changes in the processing of personally identifiable information are made in accordance with requirements</i>
	PT-03_ODP[04]	<i>requirements for changing the processing of personally identifiable information are defined;</i>
	PT-03a.	the <PT-03_ODP[01] purpose(s)> for processing personally identifiable information is/are identified and documented;
	PT-03b.[01]	the purpose(s) is/are described in the public privacy notices of the organization;
	PT-03b.[02]	the purpose(s) is/are described in the policies of the organization;
	PT-03c.	the processing of personally identifiable information are consistent with the identified purpose(s);
	PT-03d.[01]	the processing of personally identifiable information are monitored;
	PT-03d.[02]	<PT-03_ODP[03] mechanisms> are implemented to ensure that any changes are made in accordance with <PT-03_ODP[04] requirements>.
	<b>POTENTIAL ASSESSMENT METHODS AND OBJECTS:</b>	
	PT-03-Examine	[SELECTION FROM: Personally identifiable information processing and transparency]

Schema for Defining Organization-Defined Parameter  
**Assignment Statements**

ODP “unique ID” followed  
by short phrase to describe  
the ODP that was previously  
defined

## NIST



**CSV, TXT and OSCAL available  
under “Supplemental Material”**

# Looking Ahead for NIST SP 800-53



## SP 800-53 Comment Site Now Available!

- Submit your comments & ideas on SP 800-53/53B
- <https://csrc.nist.gov/Projects/risk-management/sp800-53-controls>



## The NIST RMF Team is already planning for Revision 6

- No planned date for Revision 6 yet!
- *For Revision 6*, NIST will release **draft controls**, **draft control baselines**, and **draft control assessment procedures** concurrently

**SIMPLIFY | INNOVATE | AUTOMATE**

# STAY IN TOUCH

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## CONTACT US



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# Back-up slides

# Resources



**Computer Security Resource Center (CSRC) email updates**

[https://public.govdelivery.com/accounts/USNIST/subscriber/new?qsp=USNIST\\_3](https://public.govdelivery.com/accounts/USNIST/subscriber/new?qsp=USNIST_3)



**NIST Risk Management Framework (RMF) (FISMA Implementation) Project Mailing List (announce list)**

<https://csrc.nist.gov/Projects/risk-management/mailing-list>



**Drafts Open for Comment**

<https://csrc.nist.gov/publications/drafts-open-for-comment>



**NIST Security and Privacy Control Overlay Repository (SCOR)**

<https://csrc.nist.gov/Projects/Risk-Management/scor>



**NIST National Cybersecurity Center of Excellence (NCCoE)**

<https://www.nccoe.nist.gov>



**NIST SP 800-53 Control and Control Baseline Release Search Site + Public Comment Site**

<https://nist.gov/rmf/sp800-53-controls>

# Future Revisions of SP 800-53: Release Criteria



Change Type	Minor Release	Major Release
Correct error in punctuation, spelling, or grammar that does not impact technical implementation	X	
Correct other error that does not impact technical implementation	X	
Add new control or control enhancement not in control baseline	X	
Add control or control enhancement to a control baseline (existing or new control)		X
Remove control or control enhancement from a control baseline		X
Change title of control or control enhancement	X	
Withdraw control or control enhancement not in a control baseline	X	
Withdraw control or control enhancement in a control baseline		X
Change a control or control enhancement not due to error (i.e., implementation is affected)		X
Change in discussion (e.g., reword for clarity, include examples)	X	
Significant change in discussion (e.g., change in intent)		X
Move control or control enhancement		X

# SP 800-53A Revision 5 Assessment Procedure Schema: ODP- Selection

**NEW** Schema for Defining  
Organization-Defined Parameter  
*Selection Statements*

AC-02(02)		ACCOUNT MANAGEMENT   AUTOMATED TEMPORARY AND EMERGENCY ACCOUNT MANAGEMENT
		ASSESSMENT OBJECTIVE
		Determine if:
AC-02(02)_ODP[01]		one of the following PARAMETERS is selected for automated management of temporary and emergency accounts: {remove; disable};
AC-02(02)_ODP[02]		the time period after which to automatically remove or disable temporary or emergency accounts is defined;
AC-02(02)		temporary and emergency accounts are automatically <AC-02(02)_ODP[01] SELECTED PARAMETER> after <AC-02(02)_ODP[02] time period>.
		POTENTIAL ASSESSMENT METHODS AND OBJECTS:
AC-02(02) Examine		[SELECT FROM: Access control policy; procedures for account management; system design documentation; system configuration documentation; system-generated list of temporary accounts; system-generated list of emergency accounts removal records; system security plan; other relevant documentation]
AC-02(02) Interview		[SELECT FROM: Organizational personnel with account management responsibilities; system/network administrators; organizational personnel with information security with information security responsibilities; system developers].
AC-02(02) Test		[SELECT FROM: Automated mechanisms for implementing account management functions].

ODP "unique ID" followed  
by SELECTED PARAMETER

# SP 800-53A Revision 5 Assessment Procedure Schema: ODP- Assignment nested in Selection



RA-05(02)	VULNERABILITY MONITORING AND SCANNING   UPDATE VULNERABILITIES TO BE		NEW Schema for Defining Organization-Defined Parameter <i>Selection Statements</i>
	ASSESSMENT OBJECTIVE		
	Determine if:		
	RA-05(02)_ODP[01]	one or more of the following PARAMETERS is/are selected: {<RA-05(02)_ODP[02] frequency>; prior to a new scan; when new vulnerabilities are identified and reported};	
	RA-05(02)_ODP[02]	the frequency for updating the system vulnerabilities scanned is defined (if selected);	
	RA-05(02)	the system vulnerabilities to be scanned are updated <RA-05(02)_ODP[01] SELECTED PARAMETER(S)>.	
	POTENTIAL ASSESSMENT METHODS AND OBJECTS:		
	RA-05	addressing vulnerability scanning; assessment report; vulnerability scanning tools	
	RA-05	with vulnerability scan analysis responsibilities; organizational personnel with vulnerability	NEW Schema for <i>Selection Statement</i> in the Assessment Objective
	RA-05(02) Test	[SELECT FROM: Organizational processes for vulnerability scanning; automated mechanisms/tools supporting and/or implementing vulnerability scanning].	