



**IT Security Procedural Guide:
Managing Enterprise Cybersecurity
Risk
CIO-IT Security-06-30**

Revision 24

June 26, 2023

VERSION HISTORY/CHANGE RECORD

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
Revision 1 – March 22, 2006				
1	Bo Berlas	Included the OWASP Web Application Penetration Checklist and the OWASP Testing Project documents as embedded objects into Appendix C – GSA Risk Assessment Security Requirements.	To provide a usable checklist for testing the OWASP Top Ten Vulnerabilities.	14
Revision 2 – February 13, 2007				
1	Bo Berlas	Various updates to reflect changes in A&A process	FINAL publishing of NIST 800-53 on 12/2006	4-10
2	Bo Berlas	Updated Appendix A: Risk Assessment Report Format	RA and SA are now combined into a single RA/SA report.	11
3	Bo Berlas	Updated Appendix B: GSA Security Assessment Test Procedures	Updated Assessment test procedures based on FINAL publishing of NIST 800-53 on 12/2006	15
4	Bo Berlas	Updated Appendix C: Plan of Action and Milestone (POA&M) Template	Attached new POA&M template for FY 2007.	16
5	Bo Berlas	Updated Appendix D: Risk Assessment / Security Assessment Plan Template	Updated assessment plan template to reflect combining of RA and SA reports.	17
Revision 3 – March 20, 2007				
1	Bo Berlas	Changed reference to OWASP Top Ten from 2007 Release Candidate 1 back to the 2004 Update.	OWASP Top Ten, 2007 RC1 has not been finalized. GSA will adopt the OWASP Top Ten, 2007 Update upon final publication.	6
2	Bo Berlas	New database scanning requirement.	App Detective or similar tool should be used to test database security configurations.	7
Revision 4 – October 16, 2007				
1	Bo Berlas	Updated policy reference.	GSA IT Security Policy was updated June 2007.	6
2	Bo Berlas	Changed reference to OWASP Top Ten from the 2004 Update to the current 2007 Update.	The 2007 Top Ten lists current web application vulnerabilities.	7
3	Bo Berlas	Replaced the FY 2007 POA&M Reporting Template with the FY 2008 template.	New OMB Quarterly POA&M Reporting Requirements	17
Revision 5 – July 15, 2010				
1	Bo Berlas	Update the A&A process to be consistent with NIST 300-37 and the Risk Management Framework	Updates required to ensure agency compliance.	Various
2	Bo Berlas	Inserted Roles and Responsibilities relating to A&A from the GSA IT Security Policy	Identify A&A Roles and Responsibilities	3

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
3	Bo Berlas	New implementation guidance for NIST 800-53 controls.	To facilitate implementation of required controls	25
4	Bo Berlas	New NIST 800-53 assessment test cases	Required to facilitate assessment of NIST 800-53 controls	Appendix C
5	Bo Berlas	New OCISO A&A Review SOP	Documents the process for submission of A&A packages to the OCISO and the detailed procedural steps performed by the OCISO to verify A&A compliance.	Appendix E
6	Bo Berlas	New guidance for A&A of Minor Systems	To facilitate assessment of minor systems.	22
Revision 6 – December 16, 2010				
1	Bo Berlas	Updated references for Certification, Accreditation, and Certification and Accreditation (C&A) to Assessment, Authorization, and Assessment and Authorization (A&A), respectively.	To be consistent with the current terminology in NIST 800-37.	Throughout
2	Bo Berlas	Inserted guidance for forming sections 1-10 of the SSP for cloud computing system SSPs.	To address cloud specific security challenges.	12
Revision 7 – May 31, 2011				
1	Bo Berlas	Updated references to A&A to security authorization process and authorization package or A&A package to security authorization package.	To be consistent with the current terminology in NIST 800-37.	Throughout
2	Bo Berlas	Inserted guidance for review of minimal impact SaaS solutions.	To document required review activities for such systems.	25
3	Bo Berlas	Updated Appendix E to include a revised OCISO Security Authorization Package Review SOP.	To reflect current version of the SOP.	48
Revision 8 – November 25, 2015				
1	Lewis/ Sitcharing	Changes made throughout the document to reflect NIST and GSA requirements	Updated to reflect and implement the most current NIST 800-53-Rev4 and GSA requirements	Various
Revision 9 – May 19, 2016				
1	Wilson/ Klemens	Restructuring of the document, modifications to specific process descriptions.	Updated to reflect current acceptance of risk process and rename Minor Application process to Subsystem process and revise its description. Restructuring and editing throughout.	Various

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
Revision 10 – April 10, 2017				
1	Desai Klemens	Clarifying system definitions and penetration testing requirements.	Included definitions of Federal and Contractor systems. Clarified when systems are required to have penetration tests as part of their assessment.	Sections 1.2, 4.1.7
2	Klemens	Update and edit document.	Updating of hyperlinks, editing of document, updates to align with other GSA documents.	Throughout
Revision 11 – October 10, 2017				
1	Dean Feliksa/ Klemens	Update hyperlinks and minor editorial changes.	Hyperlinks were updated so outdated, superseded documents would not be provided. Minor edits to clarify current GSA processes.	Throughout
Revision 12 – January 17, 2018				
1	Feliksa/ Klemens	Integrate the NIST Cybersecurity Framework (CSF), update A&A process and POA&M information, remove Cloud Controls.	Comply with Executive Order 13800, update processes based on revised procedures, streamline document by moving cloud controls.	Throughout
Revision 13 – May 14, 2018				
1	Klemens	Added a provision for piloting new A&A processes. Updated Lightweight Security Authorization Process, MiSaaS, CSF content.	Allows a new A&A process to be piloted/tested. Align with revised GSA and NIST guidance.	Sections 1, 3.2.2, 3.2.6, Appendix A, Appendix C
Revision 14 – February 1, 2019				
1	Klemens	Updated information on compliance/configuration scans. Updated hyperlink references. Added Program and Project Manager roles. Removed CTW as attachment to SSP.	Clarify GSA policy and guidance on compliance to hardening guides. Update to new format and style for hyperlinks. Added roles added to 2100.1. Data in the CTW is available in the SSP Template and Control Summary Table.	Throughout
2	Klemens	Added information concerning Binding Operational Directives (BOD) requirements and clarified encryption of data at rest requirements.	Clarify GSA policy and guidance on BOD and encryption requirements.	10, 12, 14, 38, 47
3	Klemens	Updated penetration testing requirements. Editing to align with current format, style, structure.	Provide the latest guidance on penetration testing requirements	34, 38, various

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
Revision 15 – July 25, 2019				
1	Klemens	Updated SC-28 (1) control applicability and parameter. Revised references to BODs to Cybersecurity Directives which include BODs and Emergency Directives. Revised parameter for SI-2(3).	Updated GSA parameters and guidance on NIST controls.	Multiple
Revision 16 – October 3, 2019				
1	Dean/ Klemens	Revised to include/update information on Showstopper Controls, configuration compliance metric, vulnerability remediation timeframes, reference additional procedural guides, and add Certification Letter as part of security authorization process.	Updated to reflect additional Federal and GSA guidance and process changes.	Multiple
2	Klemens	Added PL-8 and SA-8 to the table of GSA required controls, removed LATO SSP/SAR/Test Cases from LATO process description and appendices.	Updated to reflect additional Federal and GSA guidance and process changes.	Multiple
Revision 17 – July 1, 2020				
1	Dean/ Klemens	Revisions include: <ul style="list-style-type: none"> • Retitled to “Managing Enterprise Cybersecurity Risk” • Included the GSA Risk Executive Function role • Added a requirement for independent assessment of common controls • Added Approval to Use (ATU) and GSA processes for ATUs • Added Leveraged FedRAMP Authorization to Operate (ATO) process • Updated ATO and control sections 	Updated to reflect additional Federal and GSA guidance and process changes.	Multiple
Revision 18 – September 11, 2020				
1	Desai/Klemens	Revisions include: <ul style="list-style-type: none"> • Added guidance on implementing, documenting, and assessing Cloud Service Provider (CSP) customer responsibilities. • Updated Encryption of Sensitive Data information in Showstopper table. 	Updated to reflect GSA guidance regarding customer responsibility controls.	Sections 5.3, 5.4, and 13


Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
Revision 19 – April 15, 2021				
1	Desai/Klemens/Dean	Revisions include: <ul style="list-style-type: none"> • Incorporate NIST SP 800-37, Revision 2 • Incorporate NIST SP 800-53, Revision 5. • Update existing GSA A&A process descriptions. • Add Protecting CUI in Nonfederal Systems Assessment process. • Incorporate Clean ATO process, including update to A&A Package approval. • Add guidance on the use of operational/live data in preproduction systems. • Incorporate Management Implementation Plan processes. • Update SAR and POA&M processes. • Update the FedRAMP XaaS section to include the requirement for assessments. 	Incorporate updated NIST publications and GSA processes	Throughout
Revision 20 – May 18, 2021				
1	Desai/Klemens	Revisions include: <ul style="list-style-type: none"> • Added SC-8/SC-8(1) controls to Showstoppers and GSA additional controls. • Added CISO and AO approval required before pursuing a 90-day LATO. • Added IPv6 transition requirement. • Revised scope to clarify requirement to adhere to all GSA security guides and requirements. • Clarification on determining the appropriate ATU/ATO process to follow. 	Update showstopper controls, approval requirement to use 9-day LATO, IPv6 transition requirements, revise scope section, clarify identification of appropriate process for systems.	Multiple
Revision 21 – July 21, 2021				
1	Desai/Klemens	Revisions include: <ul style="list-style-type: none"> • Added PE-8(3), PL-9, RA-8 as additional GSA controls. • Added requirement that any ATO Letter leveraging a FedRAMP ATO must be provided to the FedRAMP PMO. • Editorial updates. 	Update additional NIST controls required by GSA, add requirement to provide FedRAMP PMO any ATO Letters leveraging FedRAMP authorizations, editorial updates.	Sections 4, 8, and 9

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
Revision 22 – December 30, 2021				
1	Desai/Klemens	Revisions include: <ul style="list-style-type: none"> • Updated timeline for NIST SP 800-53A assessments to be completed. • Updated to reflect requirements per BOD 22-01 and ED 22-02, including adding to Showstoppers. • Updated AOR section to align with latest guidance. • Updated GSA CISO controls to reflect updates to 800-53 applicability and GSA guidance. 	Updated to align with current Federal requirements, guidelines, and GSA guidance.	Throughout
Revision 23 – May 9, 2022				
1	Desai/Klemens	Revisions include: <ul style="list-style-type: none"> • Updated timeline for NIST SP 800-53/53A SSPPs and assessments to be completed. • Updated parameter for NIST SP 800-53 Control RA-9. • Updated CISA KEV POA&M and AOR information. • Updated to current format and structure. 	Updated to align with current GSA guidance.	Throughout
Revision 24 – June 26, 2023				
1	Desai/Klemens/ McCormick/ Hanna	Revisions include: <ul style="list-style-type: none"> • Updated CISA KEV POA&M and AOR information. • Updated Table E-1, Showstopper Items/Controls. • Revised Section 4.8: GSA Leveraged FedRAMP SaaS Solution Process • Updated control implementation guidance, as necessary. • Aligned to other guides. • Updated to current format and structure. • Updated system interconnection sections. • Removed references to Clean ATO guide (not published) and processes based on it. 	Updated to align with current GSA guidance.	Throughout
2	Privacy Office – Riordan, Hanna, Speidel	<ul style="list-style-type: none"> • Updated the Senior Agency Official for Privacy’s responsibilities and the Privacy office’s engagement in the A&A process. 	Updated to align with current GSA guidance.	Throughout

Change Number	Person Posting Change	Change	Reason for Change	Page Number of Change
		<ul style="list-style-type: none">• Added the Chief Privacy Officer as a signatory of the guide.		

Approval

IT Security Procedural Guide: Managing Enterprise Cybersecurity Risk, CIO-IT Security-06-30, Revision 24, is hereby approved for distribution.


DocuSigned by:

FD717926161544F...

Bo Berlas
GSA Chief Information Security Officer

Contact: GSA Office of the Chief Information Security Officer (OCISO), Policy and Compliance Division (ISP), at ispcompliance@gsa.gov.

Concurrence

The undersigned concurs with the Privacy Office's responsibilities established in this guide regarding the categorization, assessment, and authorization of GSA systems.

DocuSigned by:

171D5411100F40A...

Richard Speidel
GSA Chief Privacy Officer

Contact: GSA Office of the Chief Privacy Officer (CPO) at privacy.office@gsa.gov.

Table of Contents

1	Introduction	1
1.1	Purpose	2
1.2	Scope	2
1.3	Policy	3
1.4	GSA Archer GRC Implementation	3
1.4.1	Agency System Inventory	3
1.4.2	Authorization Packages	3
1.5	Assessment and Authorization Roles and Responsibilities	3
1.5.1	GSA Administrator	4
1.5.2	Risk Executive (Function)	4
1.5.3	GSA Chief Information Officer (CIO)	4
1.5.4	Chief Information Security Officer (CISO)	4
1.5.5	GSA Senior Agency Official for Privacy (SAOP)	4
1.5.6	GSA Chief Privacy Officer (CPO)	4
1.5.7	Heads of Services and Staff Offices (HSSOs)	5
1.5.8	Authorizing Officials (AOs)	5
1.5.9	Office of CISO Division Directors	5
1.5.10	Information System Security Managers (ISSMs)	5
1.5.11	Information System Security Officers (ISSOs)	5
1.5.12	System Owners	6
1.5.13	Program Managers	6
1.5.14	Project Managers	6
1.5.15	Data Owners (i.e., Functional Business Line Managers)	6
1.5.16	Contracting Officers (COs)/Contracting Officer's Representatives (CORs)	6
1.5.17	Custodians	6
1.5.18	Users of IT Resources	7
1.5.19	System/Network Administrators	7
1.5.20	OCISO DevSecOps Program (ODP) Security Engineers	7
2	Identifying Appropriate ATU or ATO Process	7
2.1	Identifying the Appropriate ATU Process	7
2.2	Identifying the Appropriate ATO Process	8
3	ATU Process Summaries	9
3.1	GSA Salesforce Platform Process	9
3.2	Federalist Site Process	10
3.3	RPA Process	10
3.4	Google Extensions and Add-ons	10
3.5	Google Apps Scripts	11
3.6	GCP Services	11
3.7	AWS Services	11
4	A&A Process Summaries	12
4.1	GSA Standard A&A Process	12
4.2	Lightweight Security Authorization Process	12
4.3	Low Impact Software as a Service (LiSaaS) Solutions Authorization Process	13
4.4	GSA Agency FedRAMP Process	14
4.5	Moderate Impact Software as a Service (MiSaaS) Security Authorization Process	15
4.6	GSA Subsystem Process	15
4.7	GSA Ongoing Authorization (OA) Program	16
4.8	GSA Leveraged FedRAMP SaaS Solution Process	16
5	GSA Standard A&A Process	19
5.1	RMF PREPARE Step	20
5.1.1	TASK P-1: Risk Management Roles	20
5.1.2	TASK P-2: Risk Management Strategy	20
5.1.3	TASK P-3: Risk Assessment – Organization	21

5.1.4	TASK P-4: Organizationally – Tailored Control Baselines and Cybersecurity Framework Profiles (OPTIONAL)	21
5.1.5	TASK P-5: Common Control Identification	21
5.1.6	TASK P-6: Impact-Level Prioritization (Optional)	22
5.1.7	TASK P-7: Continuous Monitoring Strategy – Organization	22
5.1.8	TASK P-8: Mission or Business Focus	22
5.1.9	TASK P-9: System Stakeholders	22
5.1.10	TASK P-10: Asset Identification	23
5.1.11	TASK P-11: Authorization Boundary	23
5.1.12	TASK P-12: Information Types	24
5.1.13	TASK P-13: Information Life Cycle	25
5.1.14	TASK P-14: Risk Assessment – System	25
5.1.15	TASK P-15: Requirements Definition	25
5.1.16	TASK P-16: Enterprise Architecture	25
5.1.17	TASK P-17: Requirements Allocation	25
5.1.18	TASK P-18: System Registration	26
5.2	RMF CATEGORIZE Step	26
5.2.1	TASK C-1: System Description	26
5.2.2	TASK C-2: System Categorization	26
5.2.3	TASK C-3: System Categorization Review and Approval	26
5.3	RMF SELECT Step	27
5.3.1	TASK S-1: Control Selection	27
5.3.2	TASK S-2: Control Tailoring	27
5.3.3	TASK S-3: Control Allocation	28
5.3.4	TASK S-4: Documentation of Planned Control Implementations	28
5.3.5	TASK S-5: Continuous Monitoring Strategy – System	29
5.3.6	TASK S-6: Plan Review and Approval	29
5.4	RMF IMPLEMENT Step	29
5.4.1	TASK I-1: Control Implementation	29
5.4.2	TASK I-2: Update Control Implementation	31
5.5	RMF ASSESS Step	31
5.5.1	TASK A-1: Assessor Selection	31
5.5.2	TASK A-2: Assessment Plan	31
5.5.3	TASK A-3: Control Assessments	33
5.5.4	TASK A-4: Assessment Reports	33
5.5.5	TASK A-5: Remediation Actions	34
5.5.6	TASK A-6: Plan of Action and Milestones	34
5.6	RMF AUTHORIZE Step	36
5.6.1	TASK R-1: Authorization Package	36
5.6.2	TASK R-2: Risk Analysis and Determination	36
5.6.3	TASK R-3: Risk Response	36
5.6.4	TASK R-4: Authorization Decision	37
5.6.5	TASK R-5: Authorization Reporting	37
5.7	RMF MONITOR Step	37
5.7.1	TASK M-1: System and Environment Changes	38
5.7.2	TASK M-2: Ongoing Assessments	38
5.7.3	TASK M-3: Ongoing Risk Response	39
5.7.4	TASK M-4: Authorization Package Updates	41
5.7.5	TASK M-5: Security and Privacy Reporting	41
5.7.6	TASK M-6: Ongoing Authorization	41
5.7.7	TASK M-7: System Disposal	42
5.8	A&A Guidance for Significant Changes	42
5.9	A&A Guidance for Expiring Authorizations	42
6	Protecting Confidential Unclassified Information (CUI) in Nonfederal Systems and Organizations	43
7	Independent Assessment of Enterprise-wide Common and Hybrid Controls	43

8	GSA Implementation of CA, PL, and RA Controls	43
8.1	Assessment, Authorization, and Monitoring (CA)	44
8.1.1	CA-1 Policy and Procedures	44
8.1.2	CA-2 Control Assessments	45
8.1.3	CA-3 Information Exchange	46
8.1.4	CA-5 Plan of Action and Milestones	47
8.1.5	CA-6 Authorization	48
8.1.6	CA-7 Continuous Monitoring	48
8.1.7	CA-8 Penetration Testing	51
8.1.8	CA-9 Internal System Connections	51
8.2	Planning (PL)	52
8.2.1	PL-1 Policy and Procedures	52
8.2.2	PL-2 System Security and Privacy Plans	53
8.2.3	PL-4 Rules of Behavior	54
8.2.4	PL-8 Information Security Architecture	55
8.2.5	PL-9 Central Management	56
8.2.6	PL-10 Baseline Selection	56
8.2.7	PL-11 Baseline Tailoring	57
8.3	Risk Assessment (RA)	57
8.3.1	RA-1 Policy and Procedures	57
8.3.2	RA-2 Security Categorization	58
8.3.3	RA-3 Risk Assessment	59
8.3.4	RA-5 Vulnerability Monitoring and Scanning	60
8.3.5	RA-7 Risk Response	62
8.3.6	RA-8 Privacy Impact Assessments	62
8.3.7	RA-9 Criticality Analysis	63
9	Additional NIST Controls Required by GSA	64
10	Summary	67
	Appendix A: CSF Function, Category, and Subcategory Definitions	68
	Appendix B: Consolidated List of Guidance, Policies, Procedures, Templates	76
	Appendix C: A&A Process Package Document Lists/Links	79
	Appendix D: Scanning Frequency By A&A Process	83
	Appendix E: Showstopper Items and Associated Controls	84
	Figure 5-1: Risk Management Framework Steps (from NIST 800-37, Revision 2)	19
	Table 2-1. GSA ATU Processes	7
	Table 2-2. GSA ATO Processes	8
	Table 5-1. GSA Information Exchange Document Type/Approval Matrix	24
	Table 9-1: GSA Additional NIST Control Requirements	64
	Table A-1: NIST CSF Functions Mapped to NIST SP 800-37 RMF Steps	69
	Table A-2: CSF Category/Subcategory Definitions	71
	Table E-1: GSA Showstopper Items/Controls	84

Notes: Hyperlinks in this guide are provided as follows:

- Appendix B - Consolidated List of Guidance, Policies, Procedures, Templates. This appendix contains hyperlinks to Federal Regulations/Guidance and to GSA web pages containing GSA policies, guides, and forms/templates.
- In running text - Hyperlinks will be provided if they link to a location within this document (i.e., a different section or an appendix). Hyperlinks will be provided for external sources unless the hyperlink is to a web page or document listed in [Appendix B](#). For example, Google Forms, Google Docs, and websites will have links.

1 Introduction

The General Services Administration (GSA) uses two approaches to permit information systems, applications, services, features, or functions to be used.

- Authorization to Operate (ATO) - An official management decision authorizing the operation of an information system and to explicitly accept the risk to agency operations (including mission, functions, image, or reputation), agency assets, individuals, other organizations, and the Nation.
- Approval to Use (ATU) – A risk-based approval process for usage of services, features, or functions on information systems or platforms with an existing ATO.

Security Assessment and Authorization (A&A) processes within the GSA lead to an ATO and are based on the National Institute of Standards and Technology (NIST) Risk Management Framework (RMF) and the security authorization process as described in NIST Special Publication (SP) 800-37, Revision 2, “Risk Management Framework for Information Systems and Organizations: A System Life Cycle Approach for Security and Privacy.” This guide describes key activities in managing enterprise-level cybersecurity risk through a system life cycle perspective including information system ATO and continuous monitoring. Every GSA Information Technology (IT) system/platform must use one of the A&A processes identified in this guide or a pilot process as described later in this section.

In [Appendix E](#), Table E-1, GSA has identified a list of Showstopper items and NIST SP 800-53 controls associated with them, including compliance with Department of Homeland Security (DHS) Cybersecurity and Infrastructure Security Agency (CISA) [Binding Operational Directives \(BODs\) and Emergency Directives \(EDs\)](#). The Showstopper items and controls associated with them, if not fully compliant, will keep a system from receiving a full ATO.

NIST SP 800-53, Revision 5, “Security and Privacy Controls for Information Systems and Organizations,” and NIST SP 800-53B, “Control Baselines for Information Systems and Organizations,” were updated on December 10, 2020. NIST SP 800-53A, Revision 5, “Assessing Security and Privacy Controls in Information Systems and Organizations,” became final on January 25, 2022. GSA has established the following groups and timelines for systems to have their System Security and Privacy Plans (SSPPs) prepared and assessments conducted in accordance with these NIST documents and GSA templates.

- Group B – Systems in GSA’s Ongoing Authorization (OA) Program.
 - 10/15/2022 – SSPPs updated to NIST 800-53, Revision 5.
 - 9/30/2023 or an AO/CISO approved exception – Ongoing ATO (OATO) updated based on an assessment of NIST 800-53, Revision 5 controls.
- Group C – GSA systems not in Group B or D.
 - 10/15/2022 – SSPPs updated to NIST 800-53, Revision 5.
 - System’s next scheduled A&A - ATO updated based on an assessment of NIST 800-53, Revision 5 controls.
- Group D – FedRAMP Leveraged Systems.
 - Within 6 months of Cloud Service Provider’s update of their FedRAMP SSPP and Customer Responsibility Matrix (CRM) to NIST SP 800-53, Revision 5 – CRM SSPPs updated to NIST 800-53, Revision 5.

- Within 2 months of CRM SSPP Update - ATO updated based on an assessment of CRM SSPP NIST 800-53, Revision 5 controls. See [Section 4.8](#) for Leveraged FedRAMP SaaS guidance.

GSA may conduct pilots of additional A&A processes when a system or the evolving IT and IT security environments indicate a process different from any of GSA's existing processes is preferred. Piloting of new processes must be coordinated with the GSA Chief Information Security Officer (CISO). Final approval of the process is indicated by the CISO concurring with any ATO resulting from the pilot.

ATU processes and procedures are based on evaluating the risk of using available services, features, or functions based on their characteristics and environment. [Section 3](#) provides additional information on GSA's ATU processes.

Any deviations from the security requirements established in GSA Order CIO 2100.1, "GSA Information Technology (IT) Security Policy" must be coordinated by the Information Systems Security Officer (ISSO) through the appropriate Information Systems Security Manager (ISSM) and authorized by the Authorizing Official (AO). Any deviations, exceptions, or other conditions not following GSA policies and standards must be submitted using the [Security Deviation/Waiver Request Form](#).

Executive Order (EO), EO 13800, "Presidential Executive Order on Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure" requires all agencies to use "The Framework for Improving Critical Infrastructure Cybersecurity (the Framework) developed by the NIST or any successor document to manage the agency's cybersecurity risk." This NIST document is commonly referred to as the Cybersecurity Framework (CSF). The CSF complements, and does not replace, an organization's risk management process and cybersecurity program. GSA uses NIST's RMF as its foundation for managing risk. Further information on how the CSF relates to GSA's use of the NIST RMF is provided in [Section 5](#) and [Appendix A](#) where the CSF categories and subcategories are defined.

1.1 Purpose

This procedural guide defines the GSA cybersecurity risk management process. It addresses the security authorization processes GSA has implemented for information systems to obtain an ATO. This guide identifies ATU processes for services, features, and functions to be used at GSA, and the process for protecting Confidential Unclassified Information (CUI) in nonfederal systems. The guide describes the key activities in managing enterprise-level cybersecurity risk as described in NIST SP 800-37. This guide assists agency and contractor personnel to understand and fulfill their security responsibilities regarding ATO, ATU, and other processes.

1.2 Scope

The requirements outlined within this guide apply to all GSA Federal employees, contractors, and vendors who oversee/protect GSA information systems and data. The guide provides GSA Federal employees, contractors, and vendors as identified in CIO 2100.1 and other IT personnel involved in performing A&A activities with the specific processes to follow for properly accomplishing cybersecurity activities. All GSA systems must adhere to one of the processes described in this guide, the security requirements specified in CIO 2100.1, and the guides listed on the [IT Security Technical Guides and Standards](#) and [IT Security Procedural Guides](#) web

pages. The following definitions are provided for classifying information systems/platforms within the scope of this guide.

- **Federal System (i.e., Agency System).** An information system in GSA's inventory processing or containing GSA or Federal information where the infrastructure and/or applications are NOT wholly operated, administered, managed, and maintained by a Contractor.
- **Contractor System.** An information system in GSA's inventory processing or containing GSA or Federal data where the infrastructure and applications are wholly operated, administered, managed, and maintained by a contractor in non-GSA facilities.

1.3 Policy

As detailed within CIO 2100.1, Authorizing Officials (AO) must ensure risk assessments are performed as part of A&A activities before a system is placed into production, when significant changes are made to the system, and as specified in this guide and the guides for GSA's other A&A processes.

1.4 GSA Archer GRC Implementation

GSA has implemented its official agency system inventory in Archer GRC. GSA is in the process of implementing authorization packages for its system inventory using Archer GRC's A&A module. As GSA continues its Archer implementation, specific activities described in the guide will be incorporated in Archer to take advantage of its automation capabilities. Any questions regarding the use of Archer GRC at GSA should be sent to archersupport@gsa.gov.

1.4.1 Agency System Inventory

The agency system inventory in Archer GRC contains attributes such as responsible organization, system name, Federal Information Processing Standards Publication (FIPS) 199, "Standards for Security Categorization of Federal Information and Information Systems" security categorization level, ATO type, and ATO date. The inventory includes an A&A repository for storing all system A&A documents and artifacts for GSA systems.

1.4.2 Authorization Packages

Authorization packages have been created in Archer GRC for GSA's systems and the task of implementing the authorization process for systems is just starting. The first steps in this process include inputting security categorization, privacy, and system demographics (boundary, connections, etc.) into Archer GRC, and allocating NIST SP 800-53 security controls. Future steps include conducting assessments, managing plans of action and milestones (POA&Ms), and the entire A&A process in Archer GRC.

1.5 Assessment and Authorization Roles and Responsibilities

There are many roles associated with the security authorization process. System Owners for each information system are responsible for ensuring their respective Service and Staff Office's (SSO) systems have been through the GSA A&A process, have received an ATO from the AO, and received concurrence from the GSA Office of the CISO (OCISO). The complete roles and responsibilities for agency management officials and others with significant IT Security

responsibilities are defined fully in Chapter 2 of CIO 2100.1. The following sections provide a high-level description of the responsibility for the primary roles with management and operational A&A responsibilities.

1.5.1 GSA Administrator

The GSA Administrator is responsible for ensuring an information security program is developed, documented, and implemented to provide security for all systems, networks, and data that support the operations of GSA.

1.5.2 Risk Executive (Function)

The Risk Executive (Function) at GSA is handled by the Enterprise Management Board (EMB), chaired by the Deputy Administrator who is also the Senior Accountable Official for Risk Management (SAORM). For cybersecurity risks, the Enterprise Risk and Strategic Initiatives (ERSI) board, co-chaired by the Deputy Performance Improvement Officer and the CISO, identifies and monitors agency-wide risks and ensures the EMB is updated on the risks and impacts to GSA. The CISO, Authorizing Officials, and subject matter experts facilitate the consistent application of cybersecurity risk management across GSA.

1.5.3 GSA Chief Information Officer (CIO)

The GSA Chief Information Officer (CIO) has overall responsibility for the GSA IT Security Program. The CIO is responsible for providing guidance, assistance, support, and management processes to GSA staff and organizations to enable them to perform their responsibilities with regard to GSA's IT Security Program.

1.5.4 Chief Information Security Officer (CISO)

Public Law 113-283, "Federal Information Security Modernization Act of 2014" (FISMA), establishes the designation of a senior agency information security officer responsible for complying with Federal security requirements. GSA has assigned this role to the CISO. The CISO is the focal point for all GSA IT security and must ensure the security requirements described in this Order are implemented agency wide. The CISO reports directly to the CIO as required by FISMA.

1.5.5 GSA Senior Agency Official for Privacy (SAOP)

The SAOP is responsible for ensuring GSA's compliance with privacy laws, regulations and GSA policy, and the privacy control baseline in NIST SP 800-53. The SAOP designates which privacy controls can be treated as common and hybrid. The SAOP, or delegated privacy personnel, approve system categorizations and oversee proper implementation of privacy controls. The SAOP reviews authorization packages to ensure compliance with applicable privacy requirements and to manage privacy risks prior to authorizing officials making risk determination and acceptance decisions.

1.5.6 GSA Chief Privacy Officer (CPO)

The CPO is responsible for overseeing GSA's Privacy Program whose mission it is to preserve and enhance privacy protections for all individuals whose personal information is handled by GSA and to encourage transparency of GSA operations involving personal information. The

CPO manages GSA's Privacy Act Program and administers GSA's compliance with privacy laws and regulations. The CPO is responsible for developing, managing, and administering GSA's Privacy Program Plan and Privacy Strategy Plan.

1.5.7 Privacy Analysts

Privacy Analysts are responsible for ensuring implementation of adequate privacy for a system in order to document, mitigate, and minimize the privacy risks associated with collecting, using, processing, storing, maintaining, and disseminating PII. A Privacy Analyst must be assigned for every information system that contains PII and may have responsibility for more than one system, provided there is no conflict. The Privacy Analyst must be knowledgeable of the PII and processes supported by their assigned systems. Privacy Analysts, when delegated, approve system categorizations, and oversee proper implementation of privacy controls. Privacy Analysts review PTAs/PIAs for their assigned systems.

1.5.8 Heads of Services and Staff Offices (HSSOs)

HSSOs are responsible for authorizing the operation of all systems, networks, and applications for which they have responsibility. They may delegate some of their authority (e.g., the role of Authorizing Official in writing) to appropriately qualified individuals within their organizations.

1.5.9 Authorizing Officials (AOs)

AOs are responsible for authorizing the operation of all systems, networks, and applications for which they have responsibility. They may delegate some of their authority (e.g., the role of Authorizing Official in writing) to appropriately qualified individuals within their organizations.

1.5.10 Office of CISO Division Directors

OCISO Directors are the intermediary to the AO for ensuring IT security is properly implemented. The Directors are GSA's points of contact for all IT system security matters for the IT resources under their responsibility.

1.5.11 Information System Security Managers (ISSMs)

ISSMs report to the ISSO Support Division (IST) Director in the OCISO. There is at least one ISSM per AO. The ISSM is responsible for all IT system security and privacy matters for the systems under their authority. ISSMs work with ISSOs, System Owners, AOs, and others as security and privacy controls are implemented and review A&A packages for systems under their purview. ISSMs are appointed, in writing, by the Director of IST with concurrence by the CISO. An individual appointed as an ISSM for a system cannot also be assigned as the ISSO for the same system.

1.5.12 Information System Security Officers (ISSOs)

ISSOs are responsible for ensuring implementation of adequate system security and privacy protections, including proper control implementations, in order to manage cybersecurity risk aligned with the NIST CSF functions of Identify, Protect, Detect, Respond, and Recover. An ISSO must be assigned for every information system. An ISSO may have responsibility for more than one system, provided there is no conflict. An individual assigned as the ISSO for a system cannot also be the ISSM for the same system. ISSOs must be appointed via a designation

letter. An ISSO must be knowledgeable of the information and processes supported by their assigned systems. ISSOs review A&A packages for systems under their purview.

1.5.13 System Owners

System Owners are management officials within GSA who bear the responsibility for the acquisition, development, maintenance, implementation, and operation of GSA's IT systems. System Owners represent the interests of the system throughout its lifecycle. Primary responsibility for managing risk rests with the System Owners. System Owners must ensure their systems and the data each system processes have the necessary security and privacy controls in place and are operating as intended and protected IAW GSA regulations and any additional guidelines established by the OCISO and relayed by the ISSO or ISSM.

1.5.14 Program Managers

Program Managers are management officials within GSA who are responsible for developing, implementing, and/or overseeing multi-year IT initiatives that must be carried out through multiple related projects. A Program Manager focuses on the strategic goals of GSA. Program Managers are responsible for ensuring cyber risk is adequately managed and resources are allocated, monitored, and managed to support the required level of security for projects under their purview.

1.5.15 Project Managers

Project Managers are management officials within GSA who are responsible for managing a project within a larger program. A Project Manager is responsible for ensuring cyber risk is adequately managed and the schedule, resources, and tasks within a project include delivering security.

1.5.16 Data Owners (i.e., Functional Business Line Managers)

Data Owners are responsible for determining the security categorization level of systems based upon FIPS Publication 199, "Standards for Security Categorization of Federal Information and Information Systems," and ensuring System Owners are aware of the sensitivity of data (e.g., Personally Identifiable Information, Controlled Unclassified Information) to be handled. They must coordinate with System Owners, ISSMs, ISSOs, and Custodians to ensure the data is properly stored, maintained, protected, and monitored IAW GSA policies, regulations and any additional guidelines established by GSA.

1.5.17 Contracting Officers (COs)/Contracting Officer's Representatives (CORs)

COs/CORs are responsible for coordinating and collaborating with the CISO or other appropriate officials to ensure all agency contracts and procurements are compliant with the agency's information security policy. They also must ensure the appropriate security and privacy contracting language is incorporated in each contract and task order.

1.5.18 Custodians

Custodians own the hardware platforms and equipment on which the data is processed. They are the individuals in physical or logical possession of information from Data Owners. They

must coordinate with Data Owners and System Owners to ensure the data is properly stored, maintained, and protected.

1.5.19 Users of IT Resources

Authorized users of GSA IT resources, including all Federal employees and contractors, either by direct or indirect connections, are responsible for complying with GSA's IT Security Policy and procedures.

1.5.20 System/Network Administrators

System/Network Administrators are responsible for ensuring the appropriate security requirements are implemented consistent with GSA IT security policies and hardening guidelines.

1.5.21 OCISO DevSecOps Program (ODP) Security Engineers

ODP Security Engineers are responsible for collaborating with the system team on all aspects of system security and acting as liaison with the OCISO for security decisions and approvals.

2 Identifying Appropriate ATU or ATO Process

The next two sections list GSA's ATU and ATO processes along with applicability/qualifying criteria to use a specific process. The applicability/qualifying criteria listed in Tables 2-1 and 2-2 identify the conditions under which each process may be used. If additional guidance is necessary or there is a question about which process to use, contact any GSA ISSM, the IST, ISP, or ISE Directors, to determine the appropriate process to follow.

2.1 Identifying the Appropriate ATU Process

Table 2-1 identifies the applicability/qualifying criteria for GSA's ATU processes.

Table 2-1. GSA ATU Processes

ATU Process	Applicability/Qualifying Criteria
GSA Salesforce Platform (See Section 3.1)	<ul style="list-style-type: none"> Salesforce Organizations that integrate into GSA's Salesforce Force.com platform and are hosted on Salesforce.com's infrastructure. Applications developed for internal and external GSA use published on the GSA's Salesforce Force.com platform.
Federalist Site Review (See Section 3.2)	<ul style="list-style-type: none"> Sites hosted on the Federalist platform.
Robotic Process Automation (RPA) (See Section 3.3)	<ul style="list-style-type: none"> Bots used to interact with GSA systems.
Google Extensions and Add-ons (See Section 3.4)	<ul style="list-style-type: none"> Google Chrome browser extensions and add-ons for use within GSA.
Google Apps Scripts (See Section 3.5)	<ul style="list-style-type: none"> Google Apps scripts for use within GSA.

ATU Process	Applicability/Qualifying Criteria
Google Cloud Platform (GCP) Services (See Section 3.6)	<ul style="list-style-type: none"> Google Cloud Platform (GCP) services not currently Federal Risk and Authorization Management Program (FedRAMP) approved.
AWS Services (See Section 3.7)	<ul style="list-style-type: none"> Amazon Web Services (AWS) services not currently FedRAMP approved.

2.2 Identifying the Appropriate ATO Process

Table 2-2 identifies the applicability/qualifying criteria for GSA's ATO processes.

Table 2-2. GSA ATO Processes

ATO Process	Applicability/Qualifying Criteria
GSA Standard A&A Process (See Section 5)	<ul style="list-style-type: none"> All new and existing GSA information systems that do not fall under one of the other A&A processes.
Lightweight Security Authorization Process (See Section 4.2)	<ul style="list-style-type: none"> New GSA application. Reside on infrastructures that have a GSA ATO concurred to by the CISO or a FedRAMP infrastructure as a service (IaaS) provisional ATO. Must be FIPS 199 Low or Moderate. Prior to pursuing a 90-day Limited Authorization to Operate (LATO) the GSA CISO and AO must approve the use of the process.
Low Impact Software as a Service (LiSaaS) Solutions Authorization Process (See Section 4.3)	<ul style="list-style-type: none"> Cloud computing Software as a Service (SaaS) solutions that are implemented within GSA. Will not be used in a permanent capacity at GSA (implemented for a limited duration). Involve data already in the public domain or data is non-sensitive and determined to be FIPS 199 Low impact. Could cause limited harm to GSA regardless of the consequence of an attack or compromise. Have a cost for deployment not exceeding \$100,000 annually. Will not impact operations or business process should they experience a disruption in service or the inability to access the service. Risk level of the LiSaaS solution will be determined through completion of a LiSaaS Solution Profile available on the IT Security Forms and Aids page.
GSA Agency FedRAMP Process (See Section 4.4)	<ul style="list-style-type: none"> A CSP requesting GSA Agency sponsorship into FedRAMP. GSA accepts sponsoring the CSP. GSA determines CSP's security authorization package will be considered FedRAMP compliant.

ATO Process	Applicability/Qualifying Criteria
Moderate Impact Software as a Service (MiSaaS) Security Authorization Process (See Section 4.5)	<ul style="list-style-type: none"> • New GSA information systems. • Reside on infrastructures that have, or are pursuing, a Federal Risk and Authorization Management Program (FedRAMP) provisional ATO. • Must be FIPS 199 Moderate. • Prior to pursuing a MiSaaS ATO, the GSA CISO and AO must approve use of the process.
GSA Subsystem Process (See Section 4.6)	<ul style="list-style-type: none"> • Classified as a subsystem (and not a Salesforce application). • Dependent upon resources provided by its supporting FISMA system. • FIPS 199 Low or Moderate. • FIPS 199 level may be equal to or below the level of the supporting FISMA system.
GSA Ongoing Authorization (OA) Program (See Section 4.7)	<ul style="list-style-type: none"> • The information system must have had all its NIST SP 800-53 security controls for its applicable FIPS 199 level, and any additional controls required by the GSA CISO assessed within the past 18 months and issued an ATO. • The information system must have deployed GSA's enterprise ISCM tools, based on applicable system requirements, defined within the GSA ISCM Enterprise Security Management Tools.
GSA Leveraged FedRAMP SaaS Solution Process (See Section 4.8)	<ul style="list-style-type: none"> • Leveraged SaaS must have a FedRAMP ATO. • All customer responsibilities in the CSP's Customer Responsibility Matrix (CRM) must be addressed in a CRM SSPP. • Must be FIPS 199 Low or Moderate.

3 ATU Process Summaries

Additional details about the GSA ATU processes listed in Table 3-1 are provided in the following sections.

3.1 GSA Salesforce Platform Process

- **Document Reference:** CIO-IT Security-11-62: Salesforce Platform Security Implementation
- **Result:** Salesforce Organization or Application ATU
- **Summary of Process:** Specific to Salesforce Organizations and applications developed for internal and external GSA use published on GSA's Salesforce Force.com platform. Organizations and applications are approved for use based on implementation of NIST SP 800-53 controls, security configuration settings, user permissions, and completing the ATU process as detailed in CIO-IT Security-11-62.
- **Approval Process:** After the ISSM accepts/approves the ATU package it becomes a part of the SSPP and allows the application to be added to the Salesforce inventory along with POA&Ms reflecting any identified vulnerabilities.

3.2 Federalist Site Process

- **Document Reference:** CIO-IT Security-20-106: Federalist Site Review and Approval Process.
- **Result:** Federalist Site ATU
- **Summary of Process:** As of April 1, 2023, no new requests for onboarding to the Federalist for hosting are being accepted. Site URLs currently hosted on the Federalist must be scanned in accordance with GSA's parameter for NIST SP 800-53 control RA-5, Vulnerability Scanning, and as described in [Section 8.3.4](#). The Federalist is in the process of being decommissioned with its ATO expiring on September 30, 2023.
- **Approval Process:** No new approvals being processed.

3.3 RPA Process

- **Document Reference:** CIO-IT Security-19-97: Robotic Process Automation (RPA) Security.
- **Result:** RPA ATU
- **Summary of Process:** Each request to approve a GSA RPA Bot must include a completed Privacy Threshold Assessment (PTA) to determine if a Privacy Impact Assessment (PIA) is required and a completed [RPA Attributes Questionnaire](#), which includes questions/requirements based on the type of bot (i.e., simple, complex), rules of behavior, and interaction with systems. If an API is involved with the Bot process, the API information must be included in a Process Design Document (PDD) or a completed API Security Questionnaire.
- **Approval Process:** After reviewing the questionnaire and required artifacts, the RPA ISSO may approve simple bots. After reviewing the questionnaire and required artifacts for complex bots, the RPA ISSO relays them to the RPA ISSM for approval.

3.4 Google Extensions and Add-ons

- **Document Reference:** [Google Extensions, Add-Ons and Browser Maintenance](#)
- **Result:** Addition to the lists of GSA Approved/Rejected [Extensions](#) or [Add-ons](#)
- **Summary of Process:** Each request for a Google Extension or Add-on must follow the process described at [Google Add-On Request](#) and [Google Chrome Extension Request](#). Requests for new extensions or add-ons (i.e., those not already approved or rejected) require a Service Catalog request.
- **Approval Process:** Service Catalog requests for new extensions and add-ons are routed to the Security Engineering Division (ISE) for review. After ISE completes the review, the approved/rejected lists are updated, and the requestor notified along with rationale if rejected.

3.5 Google Apps Scripts

- **Document Reference:** GSA Order 2100.1, Chapter 4, Policy for Protect Function, Section II.
- **Result:** Google App Script ATU
- **Summary of Process:** Internally developed scripts are implicitly allowed but require review by the ISE Division and may be restricted from use pending the results of the ISE review. Internally developed scripts must follow the GSA naming convention as described in GSA Order CIO 2100.1. Externally developed scripts are prohibited but may be allowed following OCISO review.
- **Approval Process:** Use the [Google App Script Approval Form](#) to request approval for internal and external scripts. After ISE completes its review, the script will be approved or rejected, and the requestor notified along with the rationale if rejected.

3.6 GCP Services

- **Document Reference:** A CIO-IT Security Procedural Guide being developed, in the interim contact seceng@gsa.gov for information.
- **Result:** GCP (Non-FedRAMP) Services ATU
- **Summary of Process:** Specific to GCP services not currently FedRAMP approved. Requestors must provide the following details to ISE in order to request GCP services:
 - GCP Service Type;
 - GCP Service Name;
 - Service Namespace;
 - Short Service Description; and
 - Service Description.
- **Approval Process:** Requests for GCP services to be reviewed should be submitted to seceng@gsa.gov. ISE will approve or reject the GCP service based on a security review of the service. Approved services may require additional usage conditions/restrictions for use at GSA.

3.7 AWS Services

- **Document Reference:** ISE Master AWS Services Tracking List (see About This Sheet Tab)
- **Result:** AWS (Non-FedRAMP) Services ATU
- **Summary of Process:** Specific to AWS services not currently FedRAMP. Requestors must provide the following details to ISE in order to request AWS services:
 - AWS Service Description;
 - AWS Service Name; and
 - Core Security Information (see [ISE AWS Service Template](#) for details)
- **Approval Process:** Requests for AWS services to be reviewed should be submitted to seceng@gsa.gov. ISE will approve or reject the AWS service based on a security review of the service. Approved services may require additional usage conditions/restrictions for use at GSA.

4 A&A Process Summaries

GSA's different A&A processes have been developed to ensure the risks to operating GSA IT systems and their data are reduced to the extent possible based on budget constraints, business requirements and other resource issues. For all A&A processes (except for a 90-day LATO) before assessment activities for an information system can begin, the following requirements must be met:

- (1) The information system must be clearly defined in an SSPP or LiSaaS Profile/Checklist.
Note: An SSPP is not required for the 90-day LATO process.
- (2) The information system's architecture must be approved by the ISE Division .
- (3) A SAP (or other method of assessment when a SAP is not required) must be approved.

To assist ISSOs and/ISSMs in managing recurring tasks regarding A&A processes and the security of GSA information systems Federal and Contractor ISSO Checklists have been developed in GSA's implementation of Archer GRC.

Any GSA system leveraging a FedRAMP authorization must provide a copy of the GSA ATO Letter to the FedRAMP Program Management Office (PMO). ISSOs must coordinate with their ISSM to ensure the FedRAMP PMO receives notification.

Additional details about the GSA ATO processes listed in [Table 2-2](#) are provided in the following sections.

4.1 GSA Standard A&A Process

- **Document Reference:** [Section 5](#) of this guide.
- **Result:** Standard ATO.
- **Summary of Process:** All new and existing GSA information systems must undergo a security A&A at least every three (3) years or whenever there is a significant change to the system's security posture. The result is an ATO for a period not to exceed three (3) years. Specific requirements are detailed throughout this guide.
- **Approval Process:** Follows the process described in [Section 5.6.4](#), Authorization Decision.

4.2 Lightweight Security Authorization Process

- **Document Reference:** CIO-IT Security-14-68: Lightweight Security Authorization Process.
- **Result:** 90 day LATO, 1 Year LATO (Moderate); 3 Year ATO (Low).
- **Summary of Process:** New GSA information systems residing on infrastructures that have a GSA ATO concurred by the GSA CISO or a FedRAMP IaaS provisional ATO. The process supports the following ATOs. Prior to pursuing a 90-day LATO the GSA CISO and AO must approve the use of the process.

A 90-day LATO can be issued based on the results of a limited assessment (e.g., vulnerability scans, penetration tests). The following documents are required to issue a 90-day LATO:

- Architecture review conducted by the ISE Division
- FIPS 199 Security Categorization
- PTA/PIA
- Digital Identity Acceptance Statement (DIAS)
- Assessment Test Report (i.e., vulnerability scans, penetration test)
- POA&M
- Certification Memorandum
- ATO Letter.

A one-year LATO (for FIPS 199 Moderate) or a three-year ATO (for FIPS 199 Low) can be issued based on completing the process described in CIO-IT Security-14-68. The following documents are required:

- SSPP (with the following appendices/ attachments)
 - Appendix A – References
 - Attachment 1: PTA/PIA
 - Attachment 2: FIPS 199 Security Categorization
 - Attachment 3: DIAS
 - Attachment 4: Code Review Report (if applicable)
 - Attachment 5: Penetration Test Results (if applicable)
 - Attachment 6: Vulnerability Scan Results
 - Security Assessment Report (with applicable appendices/attachments)
 - Appendix A: Acronyms
 - Attachments: Additional Supporting Documents (as necessary, see note below).

NOTE: Systems receiving a 1-year LATO or a 3-year ATO would have a Security Assessment Report (SAR) with Attachments 4-6 of the SSPP typically included in the SAR instead of the SSPP.

- CSP CRM (if leveraging a cloud solution)
 - POA&M
 - Certification Memorandum
 - ATO Letter.
- **Approval Process:** Follows the process described in [Section 5.6.4](#), Authorization Decision.

4.3 Low Impact Software as a Service (LiSaaS) Solutions Authorization Process

- **Document Reference:** CIO-IT Security-16-75: Low Impact Software as a Service (LiSaaS) Solutions Authorization Process.
- **Result:** One year if the application is determined to be Low Risk, or up to three years if the application is determined to be a commodity, ancillary service that presents Very Low/Negligible risk.
- **Summary of Process:** Process is for cloud computing Software as a Service (SaaS) solutions that (1) will not be utilized in a permanent capacity at GSA (implemented for a limited duration); (2) involve data already in the public domain or data that is non-sensitive and determined to be FIPS 199 low impact; (3) could cause limited harm to GSA regardless of the consequence of an attack or compromise; (4) have a cost for deployment not exceeding \$100,000 annually; and(5) will not impact operations or

business process should they experience a disruption in service or the inability to access the service.

To receive an ATO a LiSaaS solution must complete the following actions to document the system and the risk of its use:

- Complete a LiSaaS Solution Profile.
- Complete a LiSaaS Solution Review Checklist.
- Document how system and security parameters deferred to customers are implemented.
- Provide vulnerability scan results.
- Document an acceptable flaw remediation process.
- Provide sufficient information to understand the solution's security posture and operating risk. The basic requirement is an audit report (e.g., Service Organization Control [SOC] 2/Statements on Standards for Attestation Engagements [SSAE] 18) or a certification (e.g., Systrust, WebTrust, etc.); however, the GSA AO and the CISO will take a holistic view of the application based on all documentation presented to determine the overall risk of using the application. .

Any LiSaaS solution granted a one year LiSaaS ATO must obtain a FedRAMP Tailored (at a minimum) authorization within one year of its ATO. Detailed information on the entire process is available in CIO-IT Security-16-75.

- **Approval Process:** Follows the process described in [Section 5.6.4](#): Authorization Decision.

4.4 GSA Agency FedRAMP Process

Document Reference: [CSP Authorization Playbook-Getting Started with FedRAMP](#).

GSA is developing an IT Security Procedural Guide: OCISO FedRAMP Program to define the process by which a GSA agency authorization can be achieved.

- **Result:** FedRAMP ATO (Agency)
- **Summary of Process:** A CSP, through a GSA business line, may request that GSA support the CSP through the Agency FedRAMP ATO process in efforts to achieve an ATO from GSA. It is at the discretion of GSA to accept or deny the CSP's request for sponsorship. CSPs which GSA agrees to sponsor for a FedRAMP authorization are required to follow the FedRAMP PMO authorization process requirements. CSPs must follow the FedRAMP CTW, guidance will be provided by GSA regarding requirements FedRAMP leaves for an Agency to define. Additional information about FedRAMP is available in the reference documents and at the [FedRAMP webpage](#). The CSP must work with GSA throughout the entire authorization, providing requested artifacts at various checkpoints and receiving incremental approval, and ultimately delivering a completed security authorization package to GSA. If GSA determines the package to be FedRAMP compliant, the CSP in cooperation with GSA will pursue a FedRAMP ATO.

System Owners/AOs with questions about using the FedRAMP security authorization process (to attain a Government wide authorization) should contact the OCISO at ociso.fedramp@gsa.gov.

- **Approval Process:** Follows the FedRAMP process.

4.5 Moderate Impact Software as a Service (MiSaaS) Security Authorization Process

- **Document Reference:** CIO-IT Security-18-88: Moderate Impact Software as a Service (MiSaaS) Security Authorization Process.
- **Result:** 1 Year ATO
- **Summary of Process:** New GSA information systems residing on infrastructures that have, or are pursuing, a FedRAMP provisional ATO. The process allows for a FIPS 199 Moderate impact SaaS to be granted a one-year ATO after completing the tailored RMF process detailed in CIO-IT Security-18-88. Prior to pursuing a MiSaaS ATO, the GSA CISO and AO must approve the use of the process.

The following documents are required as part of the A&A Package:

- MiSaaS SSPP
- SAR, including:
 - MiSaaS Test Case Workbook
 - OS (including DB), Web App scan data (as appropriate)
 - Penetration Test Report
 - POA&M
 - CRM
 - Certification Memorandum
 - ATO Letter
- **Result:** 1 Year ATO
- **Approval Process:** Follows the process described in [Section 5.6.4](#), Authorization Decision

4.6 GSA Subsystem Process

- **A&A Process Reference:** Described within this section.
- **Result:** ATO aligned with subsystem's supporting FISMA system.
- **Summary of Process:** This process is specific to subsystems (other than Salesforce applications) which are: (1) categorized with a FIPS 199 security impact level of Low or Moderate; and (2) dependent upon the resources provided by its supporting FISMA system. The supporting FISMA system must be shown to provide a foundational level of protection for the subsystem; the subsystem may have a FIPS 199 level equal to or below the level of its supporting FISMA system.

Subsystems with a FIPS 199 security impact level of Low will adhere to and implement the controls per CIO-IT Security-14-68: Lightweight Security Authorization Process.

Subsystems with a FIPS 199 security impact level of Moderate will document all security and privacy controls where the subsystem has either hybrid or system specific requirements in an SSPP. These controls will be assessed using GSA's NIST 800-53 Test Cases and the results shared with the supporting FISMA system's System Owner/ISSO. All subsystems will be identified in Appendix C of their supporting FISMA

system's SSPP and will be listed in the hosting/supporting system's ATO Letter. All subsystems inherit its supporting FISMA system's ATO cycle.

- **Approval Process:** New and transferred subsystems receive an ATO based on the A&A process followed (see Summary Process description above). Existing subsystems (and new and transferred when added) are included in the A&A Package review and approval process of their supporting FISMA system.

4.7 GSA Ongoing Authorization (OA) Program

- **A&A Process Reference:** CIO-IT Security-12-66: Information Security Continuous Monitoring (ISCM) Strategy & Ongoing Authorization (OA) Program.
- **Result:** Ongoing Authorization to Operate (OATO)
- **Summary of Process:** GSA has implemented its OA Program as summarized below.
 - A system must meet the OA prerequisites identified in CIO-IT Security-12-66.
 - The information system must have had all its NIST SP 800-53 security controls for its applicable FIPS 199 level, and any additional controls required by the GSA CISO assessed within the past 18 months and issued an ATO.
 - The information system must have deployed GSA's enterprise security tools, based on applicable system requirements, defined within the [GSA ISCM Enterprise Security Management Tools](#).
 - The information system must be compliant with all showstopper controls as identified in [Appendix E](#).
 - The information system must be compliant with CISA BODs and EDs.
 - An OA Checklist is completed by the OA Team in collaboration with the ISSO, ISSM, and system team. The OA checklist reviews five main security areas including ISCM/CDM Tools, Vulnerability Management, Configuration Compliance, Critical Security Controls and Security Documentation.
 - An Onboarding Assessment Report (OAR) is prepared by the OA Team and ISSO. The OAR is functionally the SAR for systems entering the OA Program.
 - Systems suitable for OA have an Onboarding Approval Meeting (OAM) held with the OA Team and system personnel.
 - OATO Letter is prepared and routed for signature.
 - Systems in OA undergo biannual performance metric reviews (PMRs) with results presented to the CISO and AO to make a risk-based determination on continuance in the OA program. Additional details are available in CIO-IT Security-12-66.
- **Approval Process:** Follows the same process described in [Section 5.6.4](#), Authorization Decision, with the following exception: the Director of ISP replaces the Director of IST.

4.8 GSA Leveraged FedRAMP SaaS Solution Process

- **A&A Process Reference:** Described within this section.
- **Result:** ATO for a Leveraged FedRAMP SaaS Solution

- **Summary of Process:** GSA's process for issuing an ATO leveraging a FedRAMP SaaS is as described below. Every instance of a leveraged solution needs its own ATO unless the ATO is for an GSA enterprise solution (e.g., Google Workspace).

Leveraged SaaS documentation, assessment, and authorizations will be limited to the GSA control baseline authorization target. Customer responsibilities identified by FedRAMP authorized CSPs that are above and beyond the GSA implemented FIPS impact level are recommended but not required to be documented, assessed, and authorized in GSA Leveraged SaaS implementations.

Any evidentiary artifacts or documents supporting the implementation status determination must be stored in a central location for review.

1. **SSPP Requirements:** A CRM SSPP is developed documenting the leveraged solution and GSA's implementation of the customer responsibilities listed in the CSP CRM for the solution. A CRM SSPP Template is available on the [InSite Forms and Aids](#) page. Required attachments to the CRM SSPP are:
 - A FIPS 199 Security Categorization template identifying the information types GSA will use with the leveraged solution.
 - A PTA to identify if any Personally Identifiable Information (PII) is used with the leveraged solution. If PII is used, a PIA will also be required.
 - A DIAS identifying the Identity, Authentication, and Federation Assurance Levels required for the leveraged solution.
 - Other attachments may be required based on the specific CRM.
2. **Security Assessment Requirements:** Assessments are conducted in relation to the CRM controls/requirements and test cases must be tailored to these requirements. Assessment evidence consists of the artifacts supporting the implementation status determinations.

FIPS 199 Low Impact SaaS

- FIPS 199 Low impact FedRAMP authorized SaaS do not require independent assessment. The CSP CRM is updated by adding four columns to the right of the last column in the customer responsibility matrix tab. The columns are to be labeled as listed below. Complete the columns, as applicable, for all the responsibilities listed.
 - o Implementation Status (Yes/No).
 - o Comments, if No.
 - o Deviation – deviations must include artifact(s) on an alternative implementation or other rationale for the deviation.
 - o Artifacts (link to artifact(s) supporting implementation status).

Self-attestation regarding the implementation status of the CSP identified CRM controls by the ISSO, ISSM, and IST Director is required. A self-attestation letter template is available on the IT Security [Forms and Aid page](#).

FIPS 199 Moderate Impact SaaS

- FIPS 199 Moderate FedRAMP authorized SaaS systems must be independently¹ assessed against the CSP-identified CRM controls.
- Assessments are conducted in relation to the CRM controls/requirements. Test cases must be tailored to the CRM control requirements. Assessment evidence consists of the artifacts supporting the implementation status determinations.
- A Security Assessment Report (SAR) must be prepared documenting the results of the assessment.

3. Authorization Package Requirements: The Leveraged SaaS Authorization Package must contain the following documents:**FIPS 199 Low Impact SaaS**

- CRM SSPP
 - o PTA/PIA
 - o FIPS 199 Security Categorization
 - o DIAS
 - o Other attachments, as necessary
- Annotated CSP CRM and any supporting artifacts
- Self-attestation letter
- POA&M
- Certification Memorandum documenting any less than fully implemented customer responsibilities
- ATO Letter

FIPS 199 Moderate Impact SaaS

- CRM SSPP
 - o PTA/PIA
 - o FIPS 199 Security Categorization
 - o DIAS
 - o Other attachments, as necessary
- Annotated CSP CRM and any supporting artifacts
- Security Assessment Report
- POA&M
- Certification Memorandum documenting any less than fully implemented customer responsibilities
- ATO Letter

4. Leveraged SaaS Authorization Approval Process: After review of the security authorization package, an ATO letter is prepared, which may be an update to an existing ATO letter for a system/platform. Templates are available on the [InSite IT Security Forms and Aids](#) page. A copy of the ATO Letter must be provided to the FedRAMP PMO. The ISSO and ISSM will coordinate delivery to FedRAMP.**5. Maintaining Leveraged SaaS ATOs:** Leveraged SaaS ATOs must be updated when the following changes occur.

¹ Independence is defined as when assessors do not: (i) have a mutual or conflicting interest with the organizations where the assessments are being conducted; (ii) assess their own work; (iii) act as management or employees of the organizations they are assessing; or (iv) place themselves in positions of advocacy for the organizations acquiring their services.

- CSP updates the Leveraged SaaS' CRM.
- GSA's implementation of the Leveraged SaaS has changed (e.g., services or functionalities added or modified).

An assessment must be conducted as stated in [item 2](#) for the changes to the CRM or GSA's implementation of services/functionalities.

5 GSA Standard A&A Process

All GSA A&A processes are based upon NIST SP 800-37. A depiction of the NIST RMF steps is provided in Figure 5-1.

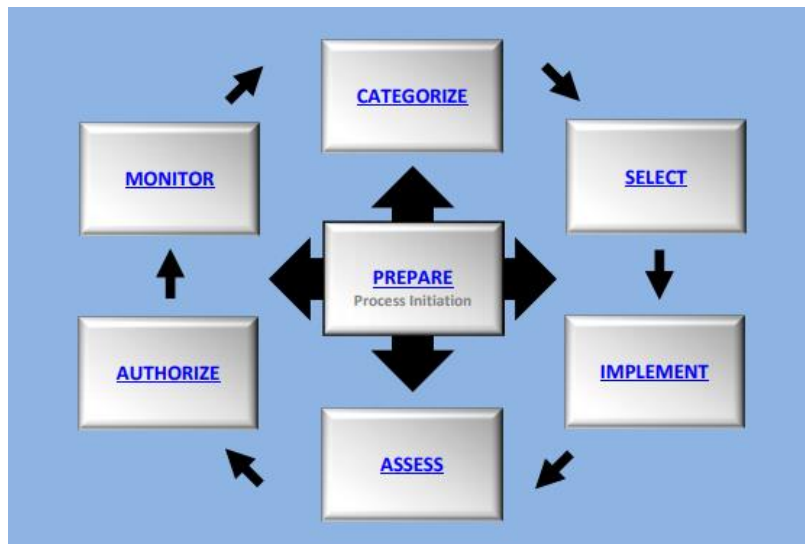


Figure 5-1: Risk Management Framework Steps (from NIST 800-37, Revision 2)

The RMF steps associated with the GSA Standard A&A Process are detailed in the following sections. Additional A&A processes GSA has developed or uses are identified in [Section 4](#) which have been adapted or modified from the standard RMF processes. Documents required as part of a GSA A&A process are listed in [Appendix C](#) along with hyperlinks (where applicable) to resources containing document templates.

The RMF steps in this section are documented in their sequential order from NIST SP 800-37. Similar to NIST SP 800-37, after the Prepare step the RMF steps may be completed in a non-sequential order due to the system type, the life cycle stage, and development process (e.g., agile development often generates multiple iterations of steps). When systems are in the Monitor step, changes to the system may cause multiple steps to be revisited. In addition, tasks in some steps may occur concurrently for efficiency. For example, in the Select step, the control selection, control tailoring, and some aspects of control allocation are interrelated which may benefit by considering them at the same time.

As required by EO 13800, GSA has aligned its risk management process with the CSF. The five core CSF Functions are:

- **Identify (ID):** Develop an organizational understanding to manage cybersecurity risk to systems, people, assets, data, and capabilities.

- **Protect (PR):** Develop and implement the appropriate safeguards to ensure delivery of critical infrastructure services.
- **Detect (DE):** Develop and implement appropriate activities to identify the occurrence of a cybersecurity event.
- **Respond (RS):** Develop and implement appropriate activities to take action regarding a detected cybersecurity incident.
- **Recover (RC):** Develop and implement appropriate activities to maintain plans for resilience and to restore any capabilities or services that were impaired due to a cybersecurity incident.

[Appendix A](#) contains a mapping of the NIST RMF steps and tasks to the five core functions of the CSF in Table A-1. Table A-2 provides the definitions for the CSF Categories and Subcategory Unique Identifiers.

5.1 RMF PREPARE Step

From NIST SP 800-37, “*The purpose of the **Prepare** step is to carry out essential activities at the organization, mission and business process, and information system levels of the organization to help prepare the organization to manage its security and privacy risks using the Risk Management Framework.*”

Organization Level Prepare Tasks

Additional details on the organizational prepare steps described in the following sections are included in CIO-IT Security-18-91: Risk Management Strategy (RMS), CIO-IT Security-18-90: Common Control Catalog (CCC), CIO-IT Security-12-66: Information Security Continuous Monitoring (ISCM) Strategy & Ongoing Authorization (OA) Program, CIO 2100.1, and guides describing GSA’s various A&A processes identified in [Section 4](#).

5.1.1 TASK P-1: Risk Management Roles

CIO 2100.1, [Section 1.5](#) of this guide, and CIO-IT Security-18-91: Risk Management Strategy (RMS) identify and assign key roles for executing the RMF within GSA. The CISO, Authorizing Officials, SAOP, ISSMs, ISSOs, System Owners, the Privacy office, and subject matter experts from the OCISO and other GSA organizations facilitate the consistent application of cybersecurity risk management across GSA.

5.1.2 TASK P-2: Risk Management Strategy

The EMB, chaired by the Deputy Administrator who is also the SAORM manages enterprise risk at GSA. For cybersecurity risks, the ERES, co-led by the Deputy Performance Improvement Officer and the CISO, identifies and monitors agency-wide risks and ensures the EMB is updated on the risks and impacts to GSA. CIO-IT Security-18-91: Risk Management Strategy provides a comprehensive approach for framing, assessing, responding to, and monitoring risks associated with GSA information systems in accordance with Federal laws, regulations, and requirements. It addresses risk tolerance, determination, acceptance, mitigation, and communication within GSA and to external organizations. The GSA [Privacy Program](#) addresses privacy risks at GSA.

5.1.3 TASK P-3: Risk Assessment – Organization

The EMB along with the ERES address risks at the organizational level. The EMB meets periodically at the direction of the Deputy Administrator (Chair) or the Chief Financial Officer/Performance Improvement Officer (Deputy Chair) to assess and update organizational risks at GSA. CIO-IT Security-18-91: Risk Management Strategy contains additional details about the EMB and ERES.

5.1.4 TASK P-4: Organizationally – Tailored Control Baselines and Cybersecurity Framework Profiles (OPTIONAL)

The various GSA A&A processes listed in [Section 4](#) of this guide, along with the GSA Control Tailoring Workbook, SSPP templates, and the controls listed in [Section 9](#) of this guide, establish and identify GSA's tailored control baselines for systems.

5.1.5 TASK P-5: Common Control Identification

GSA IT Security-18-90: Common Control Catalog (CCC) identifies enterprise-wide common and hybrid controls. It provides implementation details about common controls and common portions of hybrid controls for systems to inherit and information regarding system responsibilities for the hybrid controls.

The GSA is in the process of identifying the apportionment of controls for other common control sources such as GSA enterprise systems (e.g., general support systems, platforms) and other SSO systems or sources. System Owners inheriting controls must ensure providing systems agree that they are providing the controls and then document this inheritance in their SSPPs. As the GSA moves SSPPs into Archer GRC control inheritance will be implemented such that common control providers will designate controls being provided and systems inheriting controls will identify controls they are inheriting and the systems they are inheriting them from. As this information becomes available in Archer GRC some of the manual activities discussed will happen automatically.

Common control providers are responsible for:

- documenting common controls in an SSPP (or equivalent document prescribed by the organization);
- ensuring that common controls are developed, implemented, and assessed for effectiveness by qualified assessors with a level of independence required by the organization;
- documenting assessment findings in a security assessment report;
- producing a POA&M for all common controls deemed less than effective (i.e., having unacceptable weaknesses or deficiencies in the controls);
- receiving authorization for the common controls from the AO; and
- monitoring common control effectiveness on an ongoing basis.

The common control provider's SSPP, Security Assessment Report (SAR), and POA&M for common controls (or a summary of such information) should be made available to System Owners (whose systems are inheriting the controls) after the information is reviewed and approved by the AO responsible and accountable for the controls.

A Control Implementation Summary (CIS) table based on the system's control baseline must be completed. The table identifies control types (common, hybrid, system specific), implementation status (Fully Implemented, Partially Implemented, Planned, etc.), and responsibility (OCISO, GSS/Platform/System) for the system's controls. The table should be customized to the GSA SSO or contractor's environment to account for additional designations of responsibility as necessary. CIS table templates are available for use on the [IT Security Forms and Aids web page](#).

The completed CIS table will be included as an attachment to the SSPP. It will be updated in subsequent steps of the RMF process, including after security control implementation and following security assessment to document the results of the review.

5.1.6 TASK P-6: Impact-Level Prioritization (Optional)

GSA has not performed this optional task at this time. Systems will continue to use their FIPS 199 security categorization of Low, Moderate, or High with no further priority or level within those categories. GSA has developed additional A&A processes, as listed in [Section 4](#), which allows systems meeting the criteria for a specific process to streamline its A&A activities.

5.1.7 TASK P-7: Continuous Monitoring Strategy – Organization

The GSA continuous monitoring strategy leverages both manual and automated processes to monitor a system's security and privacy controls. The objective of the strategy is to ensure all key information security controls are periodically assessed for effectiveness. GSA's organizational continuous monitoring strategy leverages its deployment of Continuous Diagnostics and Mitigation (CDM) and other [GSA ISCM Enterprise Security Management Tools](#) (e.g., Invicti, Enterprise Logging Platform) to monitor the security of GSA's systems. CIO-IT Security-12-66: Information Security Continuous Monitoring (ISCM) Strategy & Ongoing Authorization (OA) Program provides more details on how GSA continuously monitors vulnerabilities, threats, and actions taken to reduce, mitigate, or eliminate them. Key components of GSA's strategy are regular vulnerability scanning activities and security configuration checks, the requirement to maintain A&A documents in an "as-is" state, management and review of POA&Ms, and ISSO Checklists within Archer GRC.

System Level Prepare Tasks

5.1.8 TASK P-8: Mission or Business Focus

The information system's missions, business functions, processes, and purposes the system is intended to support is to be documented in Section 9, General Description, of the GSA SSPP template. The System Owner in collaboration with the ISSO completes this section of the SSPP.

5.1.9 TASK P-9: System Stakeholders

The information system's system owner, AO, ISSO, ISSM, and other stakeholders (e.g., custodian, CSP, etc.) is to be documented in Sections 3-6 of the GSA SSPP template. The System Owner in collaboration with the ISSO completes this section of the SSPP.

5.1.10 TASK P-10: Asset Identification

The information system's assets, both tangible and intangible, are to be documented in Sections 8-10 of the GSA SSPP template. Tangible elements include physical elements, human elements, and technological elements. Intangible elements include data/information, firmware, software, services, and processes/functions. For example, the assets would include the locations, types of information, hardware and software components, and users. The System Owner in collaboration with the ISSO completes this section of the SSPP.

5.1.11 TASK P-11: Authorization Boundary

The information system's authorization boundary is documented in Sections 9-11 of the GSA SSPP template. The System Owner in collaboration with the AO and ISSO completes this section of the SSPP. The authorization boundary includes the system components, network architecture, and inventory. Diagrams showing connections and interconnections must clearly depict the authorization boundary. The tables for interconnections in the SSPP must be completed, including agreements concerning those interconnections, as applicable. CIO 2100.1 is in the process of being updated to clarify the types of documentation and agreements required when GSA systems exchange information via different types of connections both internally (i.e., within GSA) and with external organizations (e.g., other Federal entities, companies). An IT Security Procedural Guide: Managing Information Exchange Security is being developed to define how exchanging information between GSA systems and between GSA and external systems must be securely managed, any types of agreements required, and the approval authority for the information exchanges.

NIST SP 800-47, Revision 1, "Managing the Security of Information Exchanges" identifies a number of potential agreement² types that can be used to govern system information exchanges. GSA has two templates for information exchanges available on the [IT Security Forms and Aids](#) InSite page.

- **An information exchange agreement (IEA) template.** An IEA is a document that specifies protection requirements and responsibilities for information being exchanged. An IEA does not include technical details associated with an interconnection.
- **An interconnection security agreement (ISA) template.** An ISA is a document that specifies the technical and security requirements for establishing, operating, and maintaining an interconnection between two or more systems.

Until CIO 2100.1 is updated and the procedural guide on information exchanges is developed, Table 5-1 identifies the documentation and agreement requirements for GSA systems. The documentation/agreement required and how the exchange is approved is based on the level and type of data exchanged, the type or method of exchange, and if the exchange is between GSA systems (internal) or between GSA and another entity's systems (external).

² OMB Circular A-130 requires agreements (e.g., memoranda of understanding, interconnection security agreements, contracts) for interfaces between the systems used or operated by contractors or other entities on behalf of the Federal Government or that collect or maintain federal information on behalf of the Federal Government and agency-owned or operated systems.

Table 5-1. GSA Information Exchange Document Type/Approval Matrix

Note: In all cases the information exchange and method of exchange must be documented in both systems' SSPPs/documentation.

Exchange Type	Internal/ External	Data Type		
		Low	Moderate (no-PII)	High/ Moderate (w/PII)
Exchange via Enterprise service (e.g., FTP, API Gateway, RPA)	Internal	No IEA/ISA, approved when SSPPs and ATOs are approved.	No IEA/ISA, approved when SSPPs and ATOs are approved.	No IEA/ISA, approved when SSPPs and ATOs are approved.
	External	No IEA/ISA, approved when SSPPs and ATOs are approved.	No IEA/ISA, approved when SSPPs and ATOs are approved.	No IEA/ISA, approved when SSPPs and ATOs are approved.
Exchange via email, portable media, or front end file transfer	Internal	No IEA/ISA, approved when SSPPs and ATO is approved.	No IEA/ISA, approved when SSPPs and ATO is approved.	IEA, approved by AOs, CISO, Privacy (if w/PII).
	External	No IEA/ISA, approved when SSPPs and ATO is approved.	No IEA/ISA, approved when SSPPs and ATO is approved.	*IEA, approved by AOs, CISOs, Privacy (if w/PII).
Public web based services (API)	Internal	No IEA/ISA, approved when SSPPs and ATO is approved.	No IEA/ISA, approved when SSPPs and ATO is approved.	IEA, approved by AOs, CISO, Privacy (if w/PII).
	External	IEA/ISA, approved by AOs, CISOs.	IEA/ISA, approved by AOs, CISOs.	*IEA and ISA, approved by AOs, CISOs, Privacy (if w/PII)
Exchange via database or private web based services (API), or back end file transfer	Internal	No IEA/ISA, approved when SSPPs and ATO is approved.	No IEA/ISA, approved when SSPPs and ATO is approved.	IEA, approved by AOs, CISO, Privacy (if w/PII).
	External	*IEA and ISA, approved by AOs, CISOs.	*IEA and ISA, approved by AOs, CISOs.	*IEA and ISA, approved by AOs, CISO, Privacy (if w/PII).
Exchange via system interconnection. Persistent connections (i.e., VPN tunnel, VPC Peering)	Internal	IEA and ISA, approved by AOs, CISO	IEA and ISA, approved by AOs, CISO	IEA and ISA, approved by AOs, CISO, Privacy (if w/PII)
	External	*IEA and ISA, approved by AOs, CISO	*IEA and ISA, approved by AOs, CISO	*IEA and ISA, approved by AOs, CISOs, Privacy (if w/PII)

*May require a business agreement (MOA/MOU).

5.1.12 TASK P-12: Information Types

The information system's information types are documented in Section 2 of the GSA SSPP template. The data owner(s) and System Owner in collaboration with the ISSO completes this section of the SSPP. A GSA FIPS 199 Security Categorization document must be completed and attached to the SSPP. It will identify the information system types and overall security

categorization of the system based on the information types listed in NIST SP 800-60 Volumes I and II.

5.1.13 TASK P-13: Information Life Cycle

The life cycle of information must be described to include its creation or collection, processing, transmission, use, storage, and disposition. Sections 10.4 and 10.5 of the GSA SSPP template must be completed to understand much of the information life cycle. Those sections describe how data flows within and into and out of the system. Other sections of the SSPP, such as the Section 9 where the system missions, functions, and business processes must describe the collection or creation of information in order to fulfill the overall mission of the system. Specific controls regarding encryption of data and media protection and sanitization provide additional details on the transmission and disposition of information.

5.1.14 TASK P-14: Risk Assessment – System

An initial security assessment must be performed prior to a system receiving an ATO. This assessment includes assessing the risk of operating the system as detailed in the RMF Assess Step in [Section 5.5](#) of this guide. Assessment of risk is also performed as part of the RMF Monitor Step in [Section 5.7](#) of this guide.

5.1.15 TASK P-15: Requirements Definition

Completion of the GSA FIPS 199 Security Categorization and Privacy Threshold Assessment/Privacy Impact Assessment assessments provide the FIPS 199 security category of the system and the determination on whether the system contains Personally Identifiable Information (PII). These two documents determine the initial set of security requirements/controls that the system must meet/implement. GSA's various A&A processes, the Control Tailoring Workbook, SSPP templates, and [Section 9](#) of this guide further define the exact set of requirements for the system and the controls it must implement.

5.1.16 TASK P-16: Enterprise Architecture

GSA's Office of Enterprise Planning and Governance (IDR) in GSA IT is responsible for GSA's enterprise architecture. GSA Order CIO 2110.4, "GSA Enterprise Architecture Policy" utilizes GSA's strategic goals, mission and support services, data, and enabling technologies to communicate the business vision and target architecture in conjunction with the GSA Performance Management, Capital Planning, and Investment Control (CPIC), and Solutions Life Cycle (SLC) processes. The ISE Division works closely with IDR and other SSOs to facilitate integration of security standards/requirements into development efforts, ensuring secure outcomes as a matter of routine. Additional information is available in CIO-IT Security-18-90: Common Control Catalog (CCC) and the [GSA EA Analytics & Reporting \(GEAR\) website](#).

5.1.17 TASK P-17: Requirements Allocation

Controls are allocated based on the common, hybrid, and system specific designations identified in CIO-IT Security-18-90: Common Control Catalog (CCC), GSA's various A&A processes, the Control Tailoring Workbook, and SSPP templates. GSA is also in the process of a control allocation mapping among its GSSs and Platforms to identify controls common or hybrid at those levels that systems can inherit. Allocation of controls to system components is the purview of the System Owner in collaboration with the OCISO.

5.1.18 TASK P-18: System Registration

Program Managers and Project Managers collaborate with the GSA SSOs as new systems are being considered for design, development, piloting, or implementation. GSA's ISSMs and ISSOs work closely with those offices and personnel to ensure systems are registered into the GSA system inventory as early as possible. Archer GRC is the repository for GSA's system inventory. Systems are registered in it as soon as they are identified and categorized as pending. They will stay in this status until they are placed into production.

5.2 RMF CATEGORIZE Step

From NIST SP 800-37, "*The purpose of the **Categorize** step is to inform organizational risk management processes and tasks by determining the adverse impact to organizational operations and assets, individuals, other organizations, and the Nation with respect to the loss of confidentiality, integrity, and availability of organizational systems and the information processed, stored, and transmitted by those systems.*"

The following tasks detail the actions in the RMF categorize step. As GSA implements automation into its A&A processes, the tasks described in the following sections will be migrated, as much as possible, to GSA's implementation of Archer GRC.

5.2.1 TASK C-1: System Description

The information system is described throughout Sections 1-12 of the GSA SSPP template. The System Owner in collaboration with the ISSO completes these sections of the SSPP. These sections cover the system's operational environment, hardware, and software inventory, FIPS 199 security categorization, data, users, roles, architecture, connections, etc. Each section should be sufficiently detailed to permit readers to understand the business functions of the system, how the system architecture and components support those functions, how data is collected, processed, and transmitted internally and externally (i.e., data flow), the sensitivity of the data the system handles, the user base, and the key points of contact. The System Owner in collaboration with the ISSO completes these sections of the SSPP.

5.2.2 TASK C-2: System Categorization

Use GSA's FIPS 199 Security Categorization Template to identify the information types handled by the system. Once completed it is summarized in Section of the SSPP with the completed FIPS 199 template attached to the SSPP. NIST SP 800-60 Volumes I and II are used to identify the information types handled by the system. The result of the system categorization is used in a future step to select security controls for the system. The data owner collaborates with the System Owner and the ISSO to complete the template.

5.2.3 TASK C-3: System Categorization Review and Approval

The system FIPS 199 security categorization from the previous step must be reviewed and approved by the AO, CISO, and SAOP, or their designated representatives. Delegated representatives must be Federal employees. The ISSO collaborates with the AO, OCISO, Privacy Team, and data owner as necessary to have the FIPS 199 security categorization approved.

5.3 RMF SELECT Step

From NIST SP 800-37, “The purpose of the **Select** step is to select, tailor, and document the controls necessary to protect the information system and organization commensurate with risk to organizational operations and assets, individuals, other organizations, and the Nation.”

The following tasks detail the actions in the RMF select step. As GSA implements automation into its A&A processes, the tasks described in the following sections will be migrated, as much as possible, to GSA’s implementation of Archer GRC.

5.3.1 TASK S-1: Control Selection

The system’s FIPS 199 security categorization and PTA/PIAs determine the initial set of security controls that the system must meet/implement. GSA’s various A&A processes, the CTW, and [Section 9](#) of this guide further define the specific set of controls the system must implement. The System Owner collaborates with the AO, ISSM, ISSO, and Privacy Team as necessary to complete the control selection task.

Note: Additional Federal requirements such as [CISA Cybersecurity Directives](#) must be included in a system’s set of requirements.

5.3.2 TASK S-2: Control Tailoring

After the security controls for a system have been selected in the previous task, tailoring of those controls commences. Tailoring includes:

- Determining common controls the system inherits.
- Assigning values to any parameters identified as being left up to the system for assignment and requiring GSA AO and CISO approval.
- Determining if any compensating or supplemental controls are required to address unique organizational and/or system specific needs. These needs may be based on a risk assessment (either formal or informal), local conditions including environment of operation, organization-specific security requirements, specific threat information, cost-benefit analyses, or special circumstances.

Justification or rationale for tailoring actions is required, especially where the CISO and AO must approve assignments and if any controls are identified as not applicable to the system or its environment.

Systems must complete a CTW and provide it as an attachment to the SSPP. The CTW identifies the GSA defined values for NIST SP 800-53 control assignments and selections. The selected security controls including any controls or enhancements selected above the baseline for the information system will be documented in the SSPP. Both the SSPP and the CTW identify parameter assignments or selections deferred to the SSO or contractor for recommendation and approval by the GSA AO and CISO. The CTW contains columns for identifying the defined values and GSA approval of the values.

Similarly, systems must complete a CIS which identifies the control types (common, hybrid, system specific), implementation status (Fully Implemented, Partially Implemented, Planned, etc.), and responsibility (OCISO, GSS/Platform/System) for the system’s controls. It will be

updated in subsequent steps of the RMF process, including after security control implementation and following security assessment to document the results of the review.

The System Owner collaborates with the ISSM, ISSO, Privacy Team as necessary, and other System Owners (regarding common/hybrid controls) to complete control tailoring.

5.3.3 TASK S-3: Control Allocation

As part of Tasks P-5: Common Control Identification and P-17: Requirements Allocation the GSA OCISO and the System Owner in collaboration with the OCSIO identified and allocated controls to the system. These controls were further defined in the previous two tasks. Now the System Owner collaborates with the ISSO to identify how controls have been allocated. This task includes verifying the common, hybrid, and system specific designations of controls and the components or elements within the system to which controls are allocated. For example, boundary protection controls may be allocated to components that manage and monitor the system boundary, access control to components that manage access to the system by users and other systems or between components of the systems. The details of control allocation must be documented in the SSPP. The System Owner collaborates with the ISSM, ISSO, Privacy Team as necessary, and other System Owners (regarding common/hybrid controls) to complete control allocation.

5.3.4 TASK S-4: Documentation of Planned Control Implementations

Systems must complete an SSPP using the GSA SSPP Template, including the appendices and attachments, as applicable, identified in [Appendix C](#). The SSPP provides an overview of the security requirements for the information system and, in this step, describes the controls planned for implementation to provide a level of security appropriate for the information to be transmitted, processed, or stored by the system. Inherited controls should be included. Detailed instructions for completing the SSPP are in the GSA SSPP Template on the [IT Security Forms and Aids web page](#). The following is an excerpt from those instructions:

- Address each control part (e.g., Part a, Part b).
- Do not just reiterate the control statement. Describe the “who, what, when, where, and how” controls are implemented.
- Address the entire IT stack (e.g., OS, database, network) and all processes that implement a control.
- Describe how GSA-defined parameters are met.
- Ensure parameters deferred to SSO or Contractor recommendation and AO and CISO approval are defined. Describe how those parameters are met.
- If controls are planned versus implemented, a time bound plan must be a part of the implementation details.
- If controls are identified as not applicable, a justification and supporting evidentiary artifacts must be presented.

The System Owner collaborates with the ISSO, Privacy Team as necessary, other System Owners (regarding common/hybrid controls), and others to complete the SSPP planned control implementations.

5.3.5 TASK S-5: Continuous Monitoring Strategy – System

Systems must develop a system-level strategy for monitoring its security controls. The system level strategy must be aligned with RMF Step [Monitor](#) and CIO-IT Security-12-66: Information Security Continuous Monitoring (ISCM) Strategy & Ongoing Authorization (OA) Program and CIO-IT Security-08-39: FY23 IT Security Program Management Implementation Plan. The system-level strategy is intended to address monitoring of controls that are not monitored as part of GSA's ISCM strategy and the frequency of their monitoring. It defines how system changes are monitored, how risk is assessed, and reporting of monitoring results. The System Owner collaborates with the ISSM, ISSO, Privacy Team as necessary, and others to establish the system-level continuous monitoring strategy.

5.3.6 TASK S-6: Plan Review and Approval

The SSPP must be reviewed and approved. The System Owner collaborates with the ISSM, ISSO, Data Owners, Privacy Team as necessary, and other System Owners (regarding common/hybrid controls), and others to complete the SSPP, including appendices and attachments.

For new systems under development, note that in the Select Step, implementation details may not be fully described since the exact implementation to satisfy control requirements may not be complete. Once completed, the SSPP is signed by the System Owner, ISSO, and the ISSM. As applicable the SSPP is signed by the Vendor ISSO and GSA Privacy Analyst assigned to the system. The SSPP and appendices/attachments as listed in Appendix C will be updated and completed as the security controls are implemented in the RMF Implement Step.

Note: Approving the security plan via the signatures noted is an agreement that the set of security controls (system-specific, hybrid, and/or common controls) proposed to meet the security requirements for the information system are sufficient. This approval allows the next step in the RMF to commence (i.e., the implementation of the security controls).

The ISE Division must review and approve the Security Architecture before the system's security controls are implemented.

5.4 RMF IMPLEMENT Step

From NIST SP 800-37, "*The purpose of the **Implement** step is to implement the controls in the security and privacy plans for the system and for the organization and to document in a baseline configuration, the specific details of the control implementation.*

The following tasks detail the actions in the RMF Implement step. As GSA implements automation into its A&A processes, the tasks described in the following sections will be migrated, as much as possible, to GSA's implementation of Archer GRC.

5.4.1 TASK I-1: Control Implementation

Describe the security and privacy control implementation in the SSPP; providing a functional description of how the control is satisfied. Security control implementation should be consistent with the GSA enterprise architecture and information security architecture. IT systems shall be configured and hardened using GSA IT security hardening guidelines (i.e., security

benchmarks), NIST guidelines, Center for Internet Security guidelines, or industry best practice guidelines, as deemed appropriate by the AO.

To the greatest extent possible, systems are encouraged to conduct initial security control assessments (also referred to as developmental testing and evaluation) during information system development and implementation. Such testing conducted in parallel with the development and implementation of the system facilitates the early identification of weaknesses and deficiencies and provides the most cost-effective method for initiating corrective actions.

Systems leveraging a cloud solution must implement the customer responsibilities identified in the CSP's CRM. Leveraged SaaS documentation, assessment, and authorizations will be limited to the GSA control baseline authorization target. Customer responsibilities identified by FedRAMP authorized CSPs that are above and beyond the GSA implemented FIPS impact level are recommended but not required to be documented, assessed, and authorized in GSA Leveraged SaaS implementations.

Federal requirements such as [CISA Cybersecurity Directives](#) include specific implementation instructions which must be fulfilled to secure the system and comply with the requirements.

The security control implementation descriptions should include planned inputs, expected behaviors, and expected outputs (where appropriate) that are typical for technical controls. The SSPP should also address platform dependencies and include any additional information necessary to describe how the security capability required by the security control is achieved at the level of detail sufficient to support control assessment in RMF Step 4.

Security controls are documented in Section 13 of the SSPP. This section must provide a thorough description of how the NIST SP 800-53 security controls for the system are being implemented or planned to be implemented. Detailed instructions for completing the SSPP are in the GSA SSPP Template, on the [IT Security Forms and Aids web page](#). For each control, descriptions must:

- Describe how (including, what, when, where, and who) the security control is being implemented or planned to be implemented for all parts of the control.
- Identify any scoping guidance that has been applied, including the type.
- Explain how all specified parameters have been met (i.e., not just stating that they have been met, also describe the "how").
- Established time bound plans are described for planned controls.
- For controls identified as Not Applicable, provide a rationale and supporting evidentiary artifacts.
- For systems with multiple components or subsystems, describe control implementations across all components.
- For systems leveraging a cloud solution, describe how the customer responsibilities in the CSP's CRM are implemented.

Systems leveraging a cloud solution must implement the customer responsibilities identified in the CSP's CRM. Only customer responsibilities associated with the GSA control baseline target must be addressed. For example, if a system is FIPS 199 Low and the CSP CRM includes FIPS 199 Moderate controls only the GSA FIPS 199 Low control baseline must be addressed.

The System Owner collaborates with the ISSM, ISSO, Privacy Team as necessary, other System Owners (regarding common/hybrid controls), and others to complete all control implementations in the SSPP.

5.4.2 TASK I-2: Update Control Implementation

During development or in the course of operating and maintaining the system the implementation details of controls may change. Changes occur for many reasons, including but not limited to infeasibility of the design, new capabilities being made available, patches and upgrades to the system. The SSPP must be updated to reflect any changed implementation details, so the SSPP always reflects the “as implemented” state of the system. In this manner when assessments, the next RMF step, occurs the assessors can determine if the system reflects its documented state or there are inconsistencies that need to be rectified.

The System Owner collaborates with the ISSM, ISSO, Privacy Team as necessary, other System Owners (regarding common/hybrid controls), and others to update control implementations in the SSPP as necessary.

5.5 RMF ASSESS Step

From NIST SP 800-37, “*The purpose of the **Assess** step is to determine if the controls selected for implementation are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting the security and privacy requirements for the system and the organization.*”

The following tasks detail the actions in the RMF Assess Step. As GSA implements automation into its A&A processes, the tasks described in the following sections will be migrated, as much as possible, to GSA’s implementation of Archer GRC.

5.5.1 TASK A-1: Assessor Selection

The key to effective assessments is having assessors with the required skills, abilities, and technical knowledge to develop assessment plans, assess controls, and prepare assessment reports. The level of independence of assessors required at GSA is (as noted regarding NIST SP 800-53 control CA-2, Enhancement 1:

Independence is defined as when assessors do not: (i) have a mutual or conflicting interest with the organizations where the assessments are being conducted; (ii) assess their own work; (iii) act as management or employees of the organizations they are assessing; or (iv) place themselves in positions of advocacy for the organizations acquiring their services.

The GSA Lead Assessor selects the assessors for a system.

5.5.2 TASK A-2: Assessment Plan

Assessors must develop and obtain approval of a Security Assessment Plan (SAP) which will be leveraged to assess the security controls of the information system. The SAP will provide system background information, the objectives for the security control assessment, the assessment approach, and the assessment test cases to be used in Task A-3. Developing the plan may require updates and/or supplements to GSA’s NIST 800-53 Revision 5 Test Cases. As

necessary assessors will incorporate additional assessment test cases for any supplemented controls and/or control enhancements added during RMF Select step.

Note: Assessment of additional Federal requirements including, but not limited to, [CISA Cybersecurity Directives](#) (i.e., BODs/EDs) must be included in the SAP as appropriate.

The following security assessment requirements must be defined in the SAP and implemented for all information systems per its FIPS 199 impact level:

- **FIPS 199 Moderate and High** impact systems must be assessed by an independent third party. The use of an independent assessment team reduces the potential for conflicts of interest when verifying the implementation status and effectiveness of the security controls. Independence, per NIST, is impartiality where the assessors are free from any perceived or actual conflicts of interest with respect to the development, operation, and/or management of the information system or the determination of security control effectiveness.
- **All FIPS 199 impact level** information systems must conduct authenticated vulnerability scanning of their servers' operating systems as part of security assessment activities. Configuration/compliance scans shall be to GSA technical guidelines, NIST guidelines, Center for Internet Security guidelines, or industry best practice guidelines, as deemed appropriate and approved by the AO and CISO. Where a GSA benchmark exists, configuration scanning must be to the GSA benchmarks. Any scanning tool configured to support the benchmarks or guidelines identified may be used. Contact OCISO for information on the current tools in use or if there is a question about a specific tool.
- **All FIPS 199 impact level** information systems with web servers must conduct an authenticated vulnerability scan for the most current [Open Web Application Security Project \(OWASP\) Top Ten Web Application Security Risks](#). Any scanning tool configured to support the OWASP Top 10 may be used. Contact OCISO for information on the current tools in use or if there is a question about a specific tool. If necessary, manual testing and/or verification using the most current OWASP Testing Guide and/or CIO-IT Security-07-35: Web Application Security is also acceptable.
- **All FIPS 199 impact level** information systems with database servers will have their databases scanned as part of their OS vulnerability scanning.
- **All Internet accessible systems, FIPS 199 High impact level, and High Value Asset (HVA) information** systems, are required to complete an independent penetration test (or 'pentest') and provide a Penetration Test Report documenting the results of the exercise as part of the A&A package. These tests will be conducted in accordance with CIO-IT Security-11-51: Conducting Penetration Test Exercises.
- **FIPS 199 Moderate and High impact level** information systems (for all software except closed-source COTS), and systems following the Lightweight and MiSaaS authorization processes, are required by GSA OCISO to conduct a static code analysis using tools to examine the software for common flaws and document the results in a Code Review Report per NIST SP 800-53 Control SA-11 enhancement (1).

The SAP must be reviewed and approved by the ISSO and ISSM to ensure the plan:

- includes all appropriate security controls;
- is consistent with system/organizational security objectives;
- employs required assessment tools and techniques;
- provides assessment test cases; and

- defines the scope of the assessment and any conditions or restrictions.

For systems that have a PIA, the Privacy Analyst on behalf of the CPO and SAOP must review and approve the SAP. The overall purpose of the SAP approval is two-fold: (1) to establish the appropriate expectations for the security control assessment; and (2) to bound the level of effort for the security control assessment.

5.5.3 TASK A-3: Control Assessments

Assessors assess the security controls following the SAP and using the NIST 800-53, Revision 5 Test Cases, including any supplemental or updated tests based on the specific system as identified in Task A-2 (e.g., assessing BODs or other Federal requirements). The assessment determines if the controls implemented in the RMF Implement Step are operating as intended and producing the desired outcome with respect to meeting the security requirements for the information system. For systems that have a PIA, the Privacy Analyst on behalf of the CPO and SAOP will oversee control assessments for the privacy controls. Systems leveraging cloud solutions must include assessing the implementation of customer responsibilities from a CSP's CRM in the assessment.

5.5.4 TASK A-4: Assessment Reports

Assessors prepare a Security Assessment Report (SAR) documenting the issues, findings, and recommendations of the security control assessment (including, if applicable, a penetration test report as an attachment). The SAR documents the assessment findings with recommendation(s) and risk determinations based on NIST SP 800-30, Revision 1, "Guide for Conducting Risk Assessments." Multiple findings regarding the SSPP (Control PL-2) can be consolidated into one finding and associated with PL-2. All other findings (including scan findings) rated Low or above are reported individually in the SAR.

Additional information on addressing findings based on the source of findings (e.g., test cases, scans, pen tests) is provided in the SAR template available on the IT Security Forms and Aids [web page](#). The SAR will be included as part of the authorization package.

The risk assessment should consist of the following steps:

- Identify the list of threats and threat sources to the system. The list should include but not be limited to adversarial outsider and insider threats, accidental user threats, structural threats to its components and facilities, environmental threats to the systems facilities and supporting services.
- Align threat sources, impacts, and events with vulnerabilities.
- Assess each not fully met security control and vulnerability identified during the security assessment. Evaluating the likelihood that threat sources and events will exploit each identified vulnerability.
- Assess the possible impact to the system and GSA if the vulnerability was exploited.
- Make a determination of risk based on the likelihood the threat will exploit the vulnerability, and the resulting impact.
- Evaluate the risks of all identified vulnerabilities to determine an overall level of risk for the system or application.

Assessments must include vulnerability description, assessed risk, and recommendations for correcting the vulnerability. Assessment results for subsystems, if any, should be referenced, as appropriate, in the SAR.

Review and consider ALL risk categories in the process of preparing the final SAR. It is a common mistake to ignore some classes of vulnerabilities or findings since they are incorrectly believed to be "low risk." However, scanning tools generally categorize findings without context. They may identify false positive findings that are not real issues and false negative findings or "low/info risk" findings that may be real issues. A human reader with context and an understanding of how the system works and its environment will understand that some findings are more important than initially labeled. Moreover, low risk items often enhance the risk of other issues or can successfully be combined to generate higher risk. Once identified, they should be rated appropriately (i.e., no longer Low) in the final SAR. FIPS 199 Low or Moderate systems can possess Very High (Critical)/High risk findings the same as FIPS 199 High systems.

5.5.5 TASK A-5: Remediation Actions

Systems may perform initial remediation actions on security controls based on the findings and recommendations of the SAR and have the assessors reassess remediated control(s), as appropriate. Assessors should identify remediated vulnerabilities as "Remediated" in the final SAR. Similarly, any findings proven to be a false positive should be identified as "False Positive." Additional instructions are provided in the SAR template on the [IT Security Forms and Aids web page](#). The assessors in coordination with the System Owner, ISSO, and other system personnel validate remediated and false positive findings.

5.5.6 TASK A-6: Plan of Action and Milestones

The ISSO collaborates with the System Owner, other system personnel, and the ISSM and prepares POA&Ms as follows:

5.5.6.1 POA&Ms from a SAR

POA&Ms from a SAR adhere to the following conventions:

- Do not create POA&Ms for any vulnerabilities identified as "Remediated" or "False Positive" in the SAR.
- Create POA&Ms for all other vulnerabilities (including scan findings) in the SAR as individual POA&Ms.

5.5.6.2 POA&Ms from Other Assessments

POA&Ms from other assessments adhere to the following conventions:

- All findings from audits become individual POA&Ms.
- All findings indicating End-of-Life (EOL) software or components become individual POA&Ms.
- Vulnerability Scans
 - If vulnerabilities in the Cybersecurity & Infrastructure Security Agency (CISA) Known Exploited Vulnerabilities (KEV) Catalog cannot be readily corrected, system owners

will be given a 14-day grace period after the CISA-mandated due date or tool detection date (whichever is later) to patch or mitigate the KEV. After this period, the CIO and AO will be notified of the unmitigated risk and a recommendation provided to either; (1) shutdown the system, (2) quarantine the system; allow a POA&M and AOR for no longer than 60 days.

- POA&Ms must be created for vulnerabilities exceeding the remediation timelines listed below.
 - 15 days for Critical (Very High) vulnerabilities for Internet-accessible systems or services.
 - 30 days for Critical (Very High) and High vulnerabilities.
 - 90 days for Moderate vulnerabilities.
 - 120 days for Low vulnerabilities for Internet-accessible systems/services.
- External Vendor/Contractor systems – Low vulnerabilities must have POA&Ms established within 90 days, although there is no remediation deadline (other than as listed above).
- Configuration/Compliance Scans. A FISMA system must monitor compliance to all the configuration settings required by GSA hardening guides. Each configuration setting must be covered by one of the following clauses:
 - The configuration setting is compliant - The asset's setting is either:
 - Equal to the setting required, or
 - More restrictive than the setting required.
 - The configuration setting is not compliant - The asset is configured with a more liberal setting than required. In this case, the non-compliant configuration setting needs to be accounted for in one of the following ways:
 - Deviation - The non-compliant setting is covered by an approved deviation.
 - POA&M - If the composite compliance percentage of all assets with a single operating system is below 85% for over 90 days, a POA&M must be created for the non-compliant operating system. The resultant POA&M will state:

“Configuration/compliance scans indicate that [ENTER OPERATING SYSTEM] has been below 85% compliant for over 90 days.”

Note: GSA systems not being scanned under GSA’s vulnerability scanning program must provide supporting scan reports to the ISP Division as part of updating the POA&M via the POA&M Google Shared Drives. Scan folders are located inside of appropriate system Shared Drives for ISSOs to upload vendor provided scans.

The POA&M describes how the System Owner intends to address vulnerabilities (i.e., reduce, eliminate, or mitigate vulnerabilities). A POA&M Template and details on developing POA&Ms are contained in the POA&M procedural guide and on the POA&M Guidance Google Shared Drive. A GSA POA&M Template may be obtained by contacting ispcompliance@gsa.gov.

Update the SSPP to reflect the results of the security assessment and any modifications to the security controls in the information system. This is necessary to account for any modifications made to address recommendations for corrective actions from the security assessor. Following completion of security assessment activities, the SSPP should reflect the actual state of the security controls implemented in the system. Update the GSA CTW and applicable Control Implementation Summary Table. The updated documents must be included as appendices to the SSPP.

Note: GSA tracks all POA&Ms on [POA&M Shared Drives](#) which serve as the primary tool for the management, storage, and dissemination of GSA system and program POA&Ms. GSA will be implementing POA&Ms in Archer in the future, as systems' POA&Ms are migrated into Archer, they will be tracked in it.

5.6 RMF AUTHORIZE Step

From NIST SP 800-37, “The purpose of the **Authorize** step is to provide organizational accountability by requiring a senior management official to determine if the security and privacy risk (including supply chain risk) to organizational operations and assets, individuals, other organizations, or the Nation based on the operation of a system or the use of common controls, is acceptable.”

The following tasks detail the actions in the RMF Authorize Step. As GSA implements automation into its A&A processes, the tasks described in the following sections will be migrated, as much as possible, to GSA's implementation of Archer GRC.

5.6.1 TASK R-1: Authorization Package

The ISSO assembles the security authorization package. For GSA's Standard A&A process, the security authorization package includes:

- SSPP (with all appendices and attachments)
- Security Assessment Report (with all appendices and attachments)
- POA&M
- Certification Memorandum
- ATO Letter

Note: The documents outlined for the Security Authorization Package (above) are required for the GSA Standard A&A Process. The documentation required and links to document templates for other A&A processes GSA uses (and the standard process) are listed in [Appendix C](#).

5.6.2 TASK R-2: Risk Analysis and Determination

The AO makes the risk level determination. To do so, the AO assesses all the information documented in the Security Authorization Package regarding the current security state of the system or the common controls inherited by the system and the recommendations for addressing any residual risks. The AO consults with the CISO, System Owner, ISSM, ISSO, SAOP (for systems that have a PIA), and others as necessary to determine if the package provides enough information to establish a credible level of risk.

5.6.3 TASK R-3: Risk Response

The AO in consultation with the CISO, System Owner, ISSM, ISSO, SAOP (for systems that have a PIA), and others as necessary determines if the residual risks in operating the system need to be mitigated or can be accepted and managed via POA&Ms prior to authorization. As part of risk response prioritization of risks POA&Ms can be prioritized to focus resources on the POA&Ms that will have the greatest impact in reducing risk.

5.6.4 TASK R-4: Authorization Decision

The explicit acceptance of risk is the responsibility of the AO. The AO determines if the risk to organizational operations, organizational assets, individuals, other organizations, or the Nation is acceptable. The AO must consider many factors, balancing security considerations with mission and operational needs. The AO issues an authorization decision for the information system and the common controls inherited by the system after reviewing all the relevant information. The AO must determine if the remaining known vulnerabilities in the information system pose an acceptable level of risk to agency operations, assets, and individuals and determine if the risk to the agency is acceptable.

The preparation and routing for review and signature of the system's authorization is summarized as follows:

- IST quality checks and validates the package and prepares a Certification Memorandum and uploads documents to Archer GRC (if not already uploaded).
- The ISSM prepares the ATO Letter and uploads it to DocuSign.
- For systems that have a PIA, the SAOP reviews and signs the letter (or directs changes).
- The CISO reviews the package and coordinates with the ISSM and others and signs the letter (or directs changes).
- The AO is briefed and based on the evidence provided and whether it establishes an acceptable risk decides to:
 - Authorize system operation without any restrictions or limitations on its operations.
 - Authorize system operation with restrictions/limitations on its operations. The POA&M must include detailed corrective actions to correct the deficiencies requiring the restrictions/limitations. The ISSM/ISSO must resubmit an updated authorization package upon completion of required POA&M actions to move to a full ATO without any restrictions/limitations.
 - Not authorize the system for operation.

5.6.5 TASK R-5: Authorization Reporting

Authorization decisions are reflected in the system information in Archer GRC with high-level A&A metric data published organization-wide on the [GSA EA Analytics & Reporting \(GEAR\) website](#). Any risks that need to be raised to the enterprise level are reported through the ERES and EMB. The CISO is co-chair of the ERES with members from GSA SSOs and Regional Offices to ensure appropriate risks are raised that may influence GSA's strategy, budget planning, and resource allocation decisions.

5.7 RMF MONITOR Step

From NIST SP 800-37, *"The purpose of the **Monitor** step is to maintain an ongoing situational awareness about the security and privacy posture of the information system and the organization in support of risk management decisions."*

The following tasks detail the actions in the RMF Monitor Step **Error! Not a valid bookmark self-reference.** As GSA implements automation into its A&A processes, the tasks described in the following sections will be migrated, as much as possible, to GSA's implementation of Archer GRC.

5.7.1 TASK M-1: System and Environment Changes

System Owners must determine the security impact of proposed or actual changes to the information system and its operational environment. Per CIO-IT Security-01-05, proposed system changes must be evaluated to determine potential security impacts. An impact analysis of each proposed change will be conducted using the following as a guideline:

- Whether the change is viable and improves the performance or the security of the system;
- Whether the change is technically correct, necessary, and feasible within the system constraints;
- Whether system security will be affected by the change;
- Whether associated costs for implementing the change were considered; and
- Whether security components are affected by the change.

As outlined within CIO-IT Security-18-91 GSA has a rigorous configuration change management process. The RMS states:

- IT changes are to be requested through a defined CM approval process (e.g., a chartered Configuration Control Board [CCB]) that documents the nature of the change, the criticality, impacts on the user community, testing and rollback procedures, stakeholders, and points of contact.
- System changes are to be tested and validated prior to implementation into the production environment.
- Configuration settings and configuration baselines are to be updated as necessary to meet new technical and/or security requirements and are controlled through the CM process.

Changes may be required by outside influences. For example, if a successful exploit or identified vulnerability can be resolved or mitigated by configuration or process changes, the same CM process described above must be followed to ensure the resolution does not have unintended consequences.

5.7.2 TASK M-2: Ongoing Assessments

System Owners are responsible for assessing a subset of the NIST SP 800-53 security controls employed within and inherited by the information system in accordance with GSA's monitoring strategy. Per CIO-IT 01-05, the implemented CM process calls for continuous system monitoring to ensure that systems are operating as intended and that implemented changes do not adversely impact either the performance or security posture of the systems. Per CIO-IT Security-04-26, GSA's annual FISMA self-assessments will assess a subset of security controls. Controls are selected based on an analysis of past audit findings, known weaknesses or controls that have resulted in security breaches, key controls (e.g., Showstopper controls, critical controls), and volatile controls that should be assessed frequently. Ongoing assessments include penetration tests and OIG audits that are performed on systems.

GSA conducts ongoing assessments by leveraging its deployment of Continuous Diagnostics and Mitigation (CDM) and other [GSA ISCM Enterprise Management Tools](#). GSA's tool stack facilitates the ongoing assessments of GSA information systems by performing vulnerability scans and checking the configuration settings of systems against GSA required hardening or benchmarks.

5.7.3 TASK M-3: Ongoing Risk Response

ISSOs, System Owners, and system, network, and database administrators, will coordinate and perform remediation actions based upon the results of ongoing monitoring activities, assessment of risk, and outstanding items in the system's POA&M. CIO-IT Security-01-05 outlines the implementation of a CM process designed to lower the potential risk to a network by requiring regular "patching" or repairing of known vulnerabilities. CIO-IT Security-01-05 addresses the required steps for implementing changes; Identifying Changes, Evaluating Change Requests, Decision Implementation, and Implementing Approved Change Requests. Per CIO-IT Security-18-91, risk mitigation shall be the appropriate risk response for all critical/very high and high risks vulnerabilities that can be exploited from the Internet and cannot be accepted, avoided, shared, or transferred. Risks from identified vulnerabilities must be remediated based on the timelines specified in NIST SP 800-53 control RA-5 in [Section 8.3.4](#). No standard remediation timeline is established for Low/Very Low vulnerabilities identified for non-Internet accessible systems/services; they are to be addressed on a case-by-case basis. Risk mitigation strategies may include business process improvements, applying timely patches, configuring systems securely, performing secure application code development, and implementing architecture and design modifications as necessary. Risk mitigation measures will be employed based on prioritization. Some of the risk prioritization assessment criteria may include the probability of vulnerability exploitation, material business impact if vulnerability is successfully exploited, compliance requirements, cost and business impact of remediation activities and controls.

Specific categories of risks as described below may be accepted.

Acceptance of Risk (AOR) Letters. AOR letters are intended for rare or unusual circumstances where the System Owner has limited or no control over the remediation of an identified vulnerability. Examples of such circumstances include:

- Embedded software dependencies;
- Commercial off-the-shelf (COTS) product update timelines;
- Compatibility issues between components;
- Underlying GSS/platform issues that a system cannot remediate; and
- Contractual issues that prohibit remediation.
- Vulnerabilities in the CISA KEV that cannot be readily corrected.

Note: Due to the significant risk the KEVs pose to the federal government, AORs will only be authorized with CISO, CIO, and AO approval for no longer than 60 days. AOR requests should only be submitted based on an operational risk outweighing the security risk.

AORs are not intended for:

- Delayed or ineffective flaw remediation processes (e.g., patching, addressing known vulnerabilities);
- Insufficient out-year System Development Life Cycle planning (for legacy components);
- System Owner preferences not supported by OCISO guidance and policies;

AOR requests must include mitigating factors, compensating controls, and any other action(s) taken to reduce the risk to the system and its data, and a justification for why the vulnerability cannot be resolved. The maximum duration of an AOR letter is one year. However, the duration should be only for as long as is necessary to remediate the

vulnerabilities/findings for which the letter is being prepared (e.g., if remediation will only take 3 months the duration should be 3 months). If remediation cannot be completed within the duration of the AOR letter, a new AOR letter must be prepared. The new AOR letter must include new/current details as to why the vulnerabilities/findings were not able to be remediated and the risk description revised, as necessary. Because the resolution exceeded the original AOR letter duration, the IST Director must discuss the rationale for the new AOR letter with the CISO. Evidence of this discussion (date, etc. must be documented in the AOR letter).

Based on the criteria above, AOR letters are:

- Not required for Very Low/Low risk vulnerabilities and findings.
- Required for Moderate risk vulnerabilities and findings. Moderate risk AOR letters require AO, IST Director, and ISO Director approval, but not CISO concurrence.
- Required for Critical/Very High/High risk vulnerabilities and findings. Critical/Very High/High risk AOR letters require AO, IST Director, and ISO Director approval, and CISO concurrence.
- Required for any CISA KEV that cannot be readily corrected.

AOR Letter Processing. AOR letters are processed in the following manner:

1. The System Owner/Custodian, ISSO, and ISSM determine the need for an AOR letter.
2. The ISSO in conjunction with the ISSM prepares the AOR letter, including creation of an AOR ID# as specified below. NN is a sequential number of the AOR, YYYY is the current Fiscal Year, the brackets are not part of the AOR ID#.

AOR-NN-[System Acronym]-YYYY Example: AOR-02-EIO-2021
3. The ISSM coordinates with the Director of IST to determine if a review discussion is appropriate with stakeholders and/or the CISO. If a review discussion is required, they jointly schedule the discussion and update the letter, if necessary.
4. The ISSM submits the AOR letter to:
 - a. AO for approval of any Moderate risk AORs.
 - b. AO for approval and CISO for concurrence for any Critical/Very High and High risk AORs.
5. Approved AOR letters are part of the permanent A&A files maintained by the ISSO and ISSM. AOR letters must be uploaded into the corresponding FISMA system's Archer GRC A&A Repository and an email sent to ispcompliance@gsa.gov indicating an AOR letter has been uploaded.
6. The ISSO is responsible for monitoring POA&Ms and AOR letters. When an AOR is within 30 days of expiring:
 - a. If any POA&Ms listed in the AOR letter will not be resolved, a new AOR letter is required as described above.
 - b. If all POA&Ms have been, or will be resolved prior to AOR letter expiration, then after all POA&Ms have been resolved the AOR letter is noted as completed and archived as a historical record of the system's A&A status.
7. AORs are reviewed on a monthly basis by the ISP Division. Any issues or pending deadlines are coordinated with the appropriate personnel.

5.7.4 TASK M-4: Authorization Package Updates

The System Owner and ISSO will update the following items as part of the system and GSA continuous monitoring plans, processes, and program.

- SSPP (and all appendices and attachments);
- POA&M.

The updates will be based on regular updates required by GSA processes, such as:

- Vulnerability scans from GSA's scanning program;
- Annual FISMA self-assessments;
- Penetration tests;
- Audits, or related assessments;
- Changes identified as part of a system's CM Plan;
- For systems in the GSA OA Program, performance metrics established as part of ongoing authorization per CIO-IT Security-12-66.

As part of the CM process outlined within CIO-IT Security-01-05, security testing will be conducted following major or significant system changes. If the changes introduce vulnerabilities, actions to mitigate the vulnerabilities must be included in the system's POA&M, per GSA's POA&M management process, for tracking of the resolution. The SSPP will be updated to reflect any changes.

5.7.5 TASK M-5: Security and Privacy Reporting

The System Owner and ISSO will report the security and privacy status of the information system (including the effectiveness of security and privacy controls employed within and inherited by the system) to the AO, the SAOP, for systems that have a PIA, and other appropriate organizational officials on an ongoing basis. GSA's vulnerability management program, the POA&M management process, privacy program, and any required reporting processes/capabilities (e.g., FISMA, OA, CDM) will be used to provide security and privacy status reporting. AOs and other personnel with security and privacy related responsibilities will leverage these resources to keep apprised of the risk levels associated with GSA's system(s).

5.7.6 TASK M-6: Ongoing Authorization

GSA's OA Program as described in CIO-IT Security-12-66 relies on GSA's continuous monitoring strategy. That strategy leverages both manual and automated processes to monitor a system's security and privacy controls. The objective of the strategy is to ensure all key information security and privacy controls are periodically assessed for effectiveness. It leverages GSA's deployment of CDM and other [GSA ISCM Enterprise Management Tools](#) to monitor the security of GSA's systems. CIO-IT Security-12-66 provides more details on how GSA continuously monitors vulnerabilities, threats, and actions taken to reduce, mitigate, or eliminate them. Key components of GSA's strategy are regular vulnerability scanning activities and security configuration checks, the requirement to maintain A&A documents in an "as-is" state, management and review of POA&Ms, and ISSO Checklists within Archer GRC.

To enter the OA Program systems must meet prerequisites defined in CIO-IT Security-12-66 and successfully complete the onboarding process which includes completion of a checklist verifying the security status of the system, review of GSA's OA and showstopper controls, review of system artifacts, verifying that GSA security tools are in place and monitoring the

system. The GSA OA Team coordinates with System Owner, ISSM, and ISSO during the onboarding process and semi-annual performance reviews for systems in the OA Program.

5.7.7 TASK M-7: System Disposal

System Owners and ISSOs must manage systems from inception through disposal in accordance with GSA Order CIO 2140.4, "Information Technology (IT) Solutions Life Cycle (SLC) Policy." In support of system disposal system owners will document the transfer and/or disposal of GSA IT Systems using GSA's Transfer and Disposal Notification Templates and in accordance with the provisions outlined within CIO 2100.1.

5.8 A&A Guidance for Significant Changes

Significant changes as defined in NIST SP 800-37, Appendix F, require reauthorization following the security authorization process requirements in this guide. Contact the OCISO at ispcompliance@gsa.gov to determine the scope of reauthorization activities.

5.9 A&A Guidance for Expiring Authorizations

ISSOs, ISSMs, and the IST Director can track the expiration dates of ATOs using GSA's implementation of Archer GRC. Renewals of ATOs are initiated by the AOs, ISSMs, and ISSOs. The following extracts from CIO 2100.1 contain further guidance:

Chapter 3: Policy for Identity Function

Section 3, Governance

m. Extension of a system's current ATO for a period not to exceed one year (365 days) may only be requested under one of the following conditions. The system must continue to maintain its complete set of A&A documentation (e.g., System Security and Privacy Plan, Contingency Plan, POA&Ms). All actions to satisfy the following conditions below must be completed within the extension period (i.e., no longer than 12 months).

- (1) Transitioning to ongoing authorization;*
- (2) Planning for disposal;*
- (3) Consolidating into another system for its ATO. The scope of consolidation shall be approved by the OCISO prior to submitting the ATO extension request;*
- (4) Transitioning into a cloud environment for its ATO. The scope of the transition into the cloud environment shall be approved by the OCISO prior to submitting the ATO extension request;*
- (5) Re-competing the system's contract;*
- (6) Completing the upgrade/replacement of major infrastructure components;*
- (7) Completing the system's security assessment has been delayed due to contract issues; or*
- (8) Complying with Showstopper controls as listed in CIO-IT Security-06-30.*

n. An information system undergoing a three-year re-authorization having outstanding High or Very High/Critical vulnerabilities identified during its security assessment, may request a one-time extension for a period not to exceed thirty (30) days from the date of the ATO expiration to allow mitigation of the High and Very High/Critical vulnerabilities. No more than two extensions may be granted under this condition.

Note: The CISO may also grant extensions on a case-by-case basis due to extenuating circumstances.

Questions concerning the security authorization process, significant changes, or expiring ATOs can be directed to the designated ISSM.

6 Protecting Confidential Unclassified Information (CUI) in Nonfederal Systems and Organizations

GSA CIO-IT Security-21-112, “Protecting Controlled Unclassified Information (CUI) in Nonfederal Systems and Organizations Process,” defines the processes and procedures that will be used to ensure nonfederal systems protect CUI in accordance with the requirements of NIST SP 800-171, Revision 2, “Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations.” The requirements identified in both documents are applicable under the following conditions:

- CUI is resident in a nonfederal system and organization;
- the nonfederal organization is not collecting or maintaining information on behalf of a federal agency or using or operating a system on behalf of an agency;³ and
- there are no specific safeguarding requirements for protecting the confidentiality of CUI prescribed by the authorizing law, regulation, or governmentwide policy for the CUI category listed in the CUI Registry.⁴

The requirements apply only to components of nonfederal systems that process, store, or transmit CUI, or that provide security protection for such components.

7 Independent Assessment of Enterprise-wide Common and Hybrid Controls

CIO-IT Security-18-90: Common Control Catalog (CCC) fulfills the requirement for a security program per NIST SP 800-53, Control PM-1, Information Security Program Plan. NIST SP 800-37, requires that common controls be assessed and authorized. The controls in the CCC (both common and the common portion of hybrid controls) are assessed at least every three (3) years and authorized for use similar to any system as described in Sections [5.5](#) and [5.6](#).

8 GSA Implementation of CA, PL, and RA Controls

NIST SP 800-53 defines controls related to the security authorization process that GSA is required to implement based on an information system’s security categorization. The Assessment, Authorization, and Monitoring (CA), Planning (PL), and Risk Assessment (RA)

³ Nonfederal organizations that collect or maintain information *on behalf of* a federal agency or that use or operate a system *on behalf of* an agency, must comply with the requirements in the Federal Information Security Modernization Act (FISMA), including the requirements in [FIPS 200] and the security controls in [SP 800-53] (See [44 USC 3554] (a)(1)(A)).

⁴ The requirements in NIST SP 800-171 can be used to comply with the [FISMA] requirement for senior agency officials to provide information security for the information that supports the operations and assets under their control, including CUI that is resident in nonfederal systems and organizations (See [44 USC 3554] (a)(1)(A) and (a)(2)).

control family implementations are addressed in this guide. Only those controls applicable at any FIPS 199 Level in accordance with NIST SP 800-53B are included in this section.

8.1 Assessment, Authorization, and Monitoring (CA)

8.1.1 CA-1 Policy and Procedures

Control:

- a. Develop, document, and disseminate to *[personnel with IT security responsibilities as defined in GSA CIO Order 2100.1]*:
 1. *[Organization-level]* assessment, authorization, and monitoring policy that:
 - (a) Addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and
 - (b) Is consistent with applicable laws, executive orders, directives, regulations, policies, standards, and guidelines; and
 2. Procedures to facilitate the implementation of the assessment, authorization, and monitoring policy and the associated assessment, authorization, and monitoring controls;
- b. Designate an *[CISO]* to manage the development, documentation, and dissemination of the assessment, authorization, and monitoring policy and procedures; and
- c. Review and update the current assessment, authorization, and monitoring:
 1. Policy *[annually, as part of CIO 2100.1, GSA IT Security Policy]* and following *[changes to Federal or GSA policies, requirements, or guidance]*; and
 2. Procedures *[at least every three (3) years]* and following *[changes to Federal or GSA policies, requirements, or guidance]*.

GSA Implementation Guidance:

The GSA security assessment and authorization policy is defined in the GSA IT Security Policy, CIO 2100.1, which addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance regarding assessing and authorizing systems for GSA. This policy is consistent with applicable laws, executive orders, directives, regulations, policies, standards, and guidelines. This policy is disseminated GSA-wide via GSA's InSite centralized agency Directives website.

Security assessment and authorization procedures are documented in this guide. Additional security and assessment guides for specific types of systems have been developed and are referenced in this guide. The procedures in these guides facilitate the security assessment and authorization of all GSA systems. The guides are disseminated GSA-wide via GSA's InSite centralized agency IT Security Procedural Guides website.

The GSA CISO is responsible for managing the development, documentation, and dissemination of all IT security policies procedural guides.

The GSA OCISO is responsible for reviewing and updating CIO 2100.1 annually and following changes to Federal or GSA policies, requirements, or guidance.

The GSA OCISO is responsible for reviewing and updating CIO-IT Security 06-30 at least every three (3) years and following changes to Federal or GSA policies, requirements, or guidance.

Vendor/Contractor System Considerations: *Vendors/contractors must adhere to GSA's policy and guide regarding the security assessment and authorization of GSA systems.*

8.1.2 CA-2 Control Assessments

Control:

- a. Select the appropriate assessor or assessment team for the type of assessment to be conducted
- b. Develop a control assessment plan that describes the scope of the assessment including:
 1. Controls and control enhancements under assessment;
 2. Assessment procedures to be used to determine control effectiveness; and
 3. Assessment environment, assessment team, and assessment roles and responsibilities;
- c. Ensure the control assessment plan is reviewed and approved by the authorizing official or designated representative prior to conducting the assessment;
- d. Assess the controls in the system and its environment of operation [*annually*] to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting established security and privacy requirements;
- e. Produce a control assessment report that document the results of the assessment; and
- f. Provide the results of the control assessment to [*personnel with system security responsibilities as identified in CIO 2100.1 and CIO-IT Security 06-30*].

Control Enhancements:

- (1) Control Assessments | Independent Assessors – Employ independent assessors or assessment teams to conduct control assessments.
Note: *Assessors are independent if they do not: (i) have a mutual or conflicting interest with the organizations where the assessments are being conducted; (ii) assess their own work; (iii) act as management or employees of the organizations they are assessing; or (iv) place themselves in positions of advocacy for the organizations acquiring their services.*
- (2) Control Assessments | Specialized Assessments – Include as part of control assessments [*annual*], [*announced*], [*penetration testing*].

GSA Implementation Guidance:

GSA requires a security control assessment to be performed as defined in [Section 5.5](#) of CIO-IT-Security 06-30. The tasks in that section include the selection of the appropriate assessors, the development of an assessment plan identifying the controls to be assessed, the procedures to be used, the team, environment, and roles and responsibilities. The plan is required to be approved before the assessment can begin. The execution of the assessment plan and the preparation of the assessment report is described, including the report being part of the A&A package that is provided to the ISSM, CISO, System Owner, and AO. Assessments for GSA's A&A processes are summarized in [Section 4](#) which includes a document reference where assessment processes for a specific A&A process can be found.

As per CA-2, Enhancement (1), GSA FIPS 199 Moderate and High Impact Systems must be assessed by an independent third party. All FIPS 199 Low external vendor/contractor systems must be assessed by an independent third party. The use of an independent assessment team reduces the potential for impartiality or conflicts of interest when verifying the implementation status and effectiveness of the security controls.

As per CA-2, Enhancement (2), GSA FIPS 199 High Impact Systems must be assessed annually via announced penetration tests. Penetration testing provides a more thorough

analysis of the implementation effectiveness of security controls associated with an information system.

Vendor/Contractor System Considerations: *Vendors/contractors must adhere to GSA's policy and the controls regarding the security assessment of GSA systems.*

8.1.3 CA-3 Information Exchange

Control:

- a. Approve and manage the exchange of information between the system and other systems using [*interconnection security agreements as applicable per 06-30 and documented in the system's SSPP interconnection section (Tables 11-1 and 11-2)*];
- b. Document, as part of each exchange agreement, the interface characteristics, security and privacy requirements, controls, and responsibilities for each system, and the impact level of the information communicated; and
- c. Reviews and updates Interconnection Security Agreements [*at least annually*].

Control Enhancements:

- (6) Information Exchange | Transfer Authorizations – verify that individuals or systems transferring data between interconnecting systems have the requisite authorizations (i.e., write permissions or privileges) prior to accepting such data.

GSA Implementation Guidance:

The focus of this control is to ensure that information exchanges to any other information system outside of the system's authorization boundary have been approved by the AO, identified, and documented within the SSPP, and monitored on an ongoing basis. GSA is developing an IT Security Procedural Guide: Managing Information Exchange Security to define how exchanging information between GSA systems and between GSA and external systems must be securely managed, any types of agreements required, and the approval authority for the information exchanges.

The following policy statements from CIO 2100.1 are being revised as part of an ongoing update of CIO 2100.1. Until 2100.1 is updated the information in [Table 5-1](#) should be used to determine the type of documentation/agreement necessary for an information exchange and its approval.

GSA CIO 2100.1 policy statements on system interconnections:

Chapter 3: Policy for Identity Function

1. Asset Management

d. All interconnections between GSA and external entities including off-site contractors or Federal agency/departments must be documented in an Interconnection Security Agreement (ISA) that is approved by the AOs and concurred by the GSA CISO. ISA's must, at a minimum, be reviewed annually. See NIST SP 800-47, Revision 1, "Managing the Security of Information Exchanges" for detailed information.

f. All system interconnections, including connections to external systems, must be documented in the SSPP.

Chapter 4: Policy for Protect Function

6. Protective Technology

p. *If GSA systems interconnect, they must connect using a secure methodology providing security commensurate with the acceptable level of risk as defined in the system security and privacy plan limiting access only to the information needed by the other system IAW GSA CIO-IT Security-01-07 and GSA CIO-IT Security-06-30.*

As per CA-3, Enhancement (6), GSA FIPS 199 High Impact Systems must ensure the appropriate authorizations (i.e., write permissions or privileges) between the individuals or systems transferring data between the interconnecting systems have been verified prior to accepting such data.

Vendor/Contractor System Considerations: *Vendors/contractors must adhere to GSA policies and guides and the control requirements regarding information exchanges, the documentation/agreements necessary and the approval of the exchange/connection.*

8.1.4 CA-5 Plan of Action and Milestones

Control:

- a. Develop a plan of action and milestones for the system to document the planned remediation actions of the organization to correct weaknesses or deficiencies noted during the assessment of the controls and to reduce or eliminate known vulnerabilities in the system; and
- b. Update existing plan of action and milestones [*at least quarterly*] based on the findings from control assessments, independent audits or reviews, and continuous monitoring activities.

GSA Implementation Guidance:

The focus of this control is to ensure that all information systems have developed a POA&M in accordance with CIO-IT 09-44: Plan of Action and Milestones (POA&M) which details the POA&M processes and procedures for meeting the requirements of this control.

On a quarterly basis, POA&Ms will be reviewed by the OCISO ISP Division in order to monitor agency-wide remediation efforts as required by OMB policy. Updates to POA&Ms should be performed by the ISSO as milestones or actions occur throughout the year. POA&Ms are located on individual system [POA&M Share Drives](#) and are maintained by the system ISSO or ISSM. The POA&M Shared Drives serve as the primary location for managing and communicating GSA's system and program POA&Ms, and are available internally at GSA, or via VPN.

New systems that are currently undergoing a security authorization process or that have not been included in the GSA FISMA inventory must use the POA&M Template available on the [POA&M Guidance Shared Drive](#) or by contacting ispcompliance@gsa.gov.

Vendor/Contractor System Considerations: *Contractor systems must provide POA&Ms through their ISSO(s) as contractors will not have access to the POA&M Shared Drives. ISSOs supporting these systems must facilitate POA&M updates by sending the current version of the system POA&M together with the OCISO guidance to the contractor representative(s). Upon receipt of the POA&M from the contractor, ISSOs shall review the POA&M to ensure it is updated and includes required vulnerabilities before updating the POA&M on the GSA POA&M Shared Drives.*

8.1.5 CA-6 Authorization

Control:

- a. Assign a senior official as the authorizing official for the system;
- b. Assign a senior official as the authorizing official for common controls available for inheritance by organizational systems;
- c. Ensure that the authorizing official for the system, before commencing operations:
 1. Accepts the use of common controls inherited by the system; and
 2. Authorizes the system to operate;
- d. Ensure that the authorizing official for common controls authorizes the use of those controls for inheritance by organizational systems;
- e. Update the authorizations [*as specified in CIO-IT Security-06-30 and GSA's other Assessment and Authorization processes identified therein*].

GSA Implementation Guidance:

The OCISO issues AO Designation Letters identifying the authorizing official for all GSA information systems.

If a platform or system providing controls for other systems is authorized to operate, any common controls it is providing are authorized by the assigned AO.

CIO 2100.1 and CIO-IT-Security 06-30: Managing Enterprise Cybersecurity Risk require AOs to review and approve security safeguards of information systems and issue ATO approvals for each information system, application, or set of common controls under their purview based on the acceptability of the implementation of security safeguards in place (risk-management approach).

CIO 2100.1 and CIO-IT Security 06-30 state that final authority to operate or not operate an information system, application, or a set of common controls rests with the AO.

CIO 2100.1 and CIO-IT Security-06-30 require authorizations to be updated in accordance with the timelines defined in CIO-IT Security-06-30 and GSA's other A&A process guides. As specified in CIO-IT Security-06-30, authorizations are updated at least every three years or upon significant changes. Systems in ongoing authorization undergo biannual performance metric monitoring which fulfills the update requirement.

Vendor/Contractor System Considerations: AOs, System Owners, ISSOs, and ISSMs are responsible for coordinating the update of Vendor/Contractor security authorization packages and submitting them to the OCISO in accordance with the timelines defined in CIO-IT Security-06-30 and CIO-IT Security-19-101: External Information System Monitoring.

8.1.6 CA-7 Continuous Monitoring

Control:

Develop a system-level continuous monitoring strategy and implement continuous monitoring in accordance with the organization-level continuous monitoring strategy that includes:

- a. Establishing the following system-level metrics to be monitored: [*as specified in Section 3 of CIO-IT Security-08-39: Management Implementation Plan and CIO-IT Security-12-66: ISCM Strategy and OA Program*];
- b. Establishing [*frequencies as specified in Section 3 of CIO-IT Security-08-39: Management Implementation Plan and CIO-IT Security-12-66: ISCM Strategy and OA*]

Program] for monitoring and [*frequencies as specified in Section 3 of CIO-IT Security-08-39, Management Implementation Plan and CIO-IT Security-12-66: ISCM Strategy and OA Program*] for assessment of control effectiveness;

- c. Ongoing control assessments in accordance with the continuous monitoring strategy;
- d. Ongoing monitoring of system and organization-defined metrics in accordance with the continuous monitoring strategy;
- e. Correlation and analysis of information generated by control assessments and monitoring;
- f. Response actions to address results of the analysis of control assessment and monitoring information; and
- g. Reporting the security and privacy status of the system to [*CISO, AOs, System Owners, ISSMs, ISSOs, Custodians*] [*as specified in CIO-IT Security-08-39: Management Implementation Plan and CIO-IT Security-12-66: ISCM Strategy and OA Program*].

Control Enhancements:

- (1) Continuous Monitoring | Independent Assessment – Employ independent assessors or assessment teams to monitor the controls in the system on an ongoing basis.

NOTE: Independence is waived for all annual testing (i.e., testing can be internally performed).

- (4) Continuous Monitoring | Risk Monitoring – Ensure risk monitoring is an integral part of the continuous monitoring strategy that includes the following:
 - (a) Effectiveness monitoring;
 - (b) Compliance monitoring; and
 - (c) Change monitoring.

GSA Implementation Guidance:

The GSA OCISO developed CIO-IT Security-12-66: Information Security Continuous Monitoring Strategy (ISCM) & Ongoing Authorization (OA) Program and has established system-level metric monitoring and control assessment requirements, as defined by CIO-IT Security-08-39: FY23 IT Security Program Management Implementation Plan and CIO-IT Security-12-66.

Systems' ongoing control assessments are performed based on GSA's ATO processes defined by CIO-IT Security-06-30: Managing Enterprise Cybersecurity Risk and CIO-IT Security-12-66 for systems accepted into the OA Program. Additionally, the OCISO requires systems to complete an annual FISMA Self-Assessment unless they have completed a full assessment in the current FY.

The GSA OCISO performs ongoing monitoring of system and organization-defined metrics using automated enterprise management tools and manual processes defined by:

- CIO-IT Security-06-30: Managing Enterprise Cybersecurity Risk
- CIO-IT Security-08-39: FY23 IT Security Program Management Implementation Plan
- CIO-IT Security-09-44: Plan of Action and Milestones (POA&M)
- CIO-IT Security-17-80: Vulnerability Management Process
- CIO-IT Security-18-91: Risk Management Strategy (RMS)
- CIO-IT Security-19-101: External Information System Monitoring.

System Owners, ISSOs, and ISSMs are responsible for monitoring and adhering to assigned system level metrics in accordance with GSA IT Security Policies and procedures.

System-assigned ISSOs and ISSMs record and manage the mitigation and remediation of identified weaknesses and deficiencies that are not associated with accepted risks in organizational information systems' POA&M per CIO-IT Security-09-44. System-assigned ISSOs and ISSMs continuously perform system-level correlation and analysis of assessment results and system risk monitoring activities by performing POA&M management in coordination with System Owners and system custodians. The GSA OCISO performs POA&M reviews upon completion of an A&A and quarterly thereafter. System level quarterly POA&M Review Reports are generated by the OCISO and are provided to ISSOs for quality reviews and process improvement activities. ISSM Management Reports are generated quarterly by the OCISO to provide an agency view of status in correcting weaknesses or deficiencies associated with the managed information system portfolio.

The GSA OCISO has established and defined system-level response action requirements within:

- CIO-IT Security-06-30: Managing Enterprise Cybersecurity Risk
- CIO-IT Security-09-44: Plan of Action and Milestones
- CIO-IT Security-17-80: Vulnerability Management Process

System Owners, ISSOs, and ISSMs are responsible for managing system-level risk response activities as system risks are identified per monitoring and assessment activities. The GSA OCISO has established and defined methods for reporting system-level security and privacy status within CIO-IT Security-08-39 and CIO-IT Security-12-66. The OCISO conducts quarterly AO/CISO briefings during which systems' cyber hygiene and operational statuses are reported to the AOs. System Owners, ISSOs, ISSMs, and system custodians are responsible for reporting system-level security and privacy statuses per predefined reporting frequencies and mechanisms (e.g., ISSO Checklists, POA&Ms, and ad hoc data calls).

Per CA-7(1), the ISP Division performs operational oversight of the agency's Information Security Continuous Monitoring (ISCM) strategy and Ongoing Authorization (OA) Program. ISP performs assessment activities of the information systems accepted into the OA Program, per the program's monitoring and reporting requirements and with impartiality.

Per CA-7(4), the OCISO has established the following guides establishing effective compliance and risk monitoring policies and procedures:

- CIO-IT Security-01-05: Configuration Management (CM)
- CIO-IT Security-06-30: Managing Enterprise Cybersecurity Risk
- CIO-IT Security-08-39: FY23 IT Security Program Management Implementation Plan
- CIO-IT Security-09-44: Plan of Action and Milestones (POA&M)
- CIO-IT Security-17-80: Vulnerability Management Process
- CIO-IT Security-18-91: Risk Management Strategy (RMS)
- CIO-IT Security-19-101: External Information System Monitoring

These guides establish the agency's risk monitoring requirements for all GSA systems. Combined, they provide mechanisms for monitoring effectiveness, compliance, and changes to GSA systems and any resultant risks.

Vendor/Contractor System Considerations: System Owners, ISSOs, and ISSMs are responsible for the continuous monitoring of system level metrics, assessments, response

actions, reporting, and risk monitoring in accordance with the guides identified above for vendor/contractor systems.

8.1.7 CA-8 Penetration Testing

Control:

Conduct penetration testing [*during A&A efforts and annually thereafter*] on [*all Internet accessible, FIPS 199 High impact, and High Value Asset (HVA) information systems*].

Control Enhancements:

- (1) Penetration Testing | Independent Penetration Testing Agent or Team - Employ an independent penetration agent or penetration team to perform penetration testing on the information system or system components.

NOTE: *Independence is waived for all annual testing (i.e., testing can be internally performed).*

GSA Implementation Guidance:

For systems in scope per the defined parameter, the GSA OCISO Penetration Testing team can provide penetration testing in support of GSA systems' A&A and annual penetration testing requirements as described in CIO-IT Security-11-51: Conducting Penetration Test Exercises. If the GSA OCISO PEN Testing team is used, coordination between the system team and the Penetration testing team is required to coordinate the effort. If another entity performs the penetration testing the processes and procedures in CIO-IT Security-11-51 still must be followed.

Per CA-8(1), the GSA OCISO Penetration Testing team performs penetration testing activities on behalf of GSA as an independent testing agent. The GSA OCISO Penetration Testing team is free from any perceived or actual conflicts of interest with respect to the development, operation, or management of the systems that are the targets of the penetration testing activities performed by the team. *Independence is waived for all annual testing (i.e., testing can be internally performed).*

Vendor/Contractor System Considerations: *If the GSA OCISO Penetration Testing team performs the penetration test, the System Owner, ISSO, and ISSM must coordinate with the penetration testing team to schedule their services. If an external penetration testing vendor performs the penetration test, the external penetration testing vendor must complete the minimum requirements set forth in CIO-IT Security-11-51. As identified above, the OCISO Penetration Testing team is independent; if penetration testing is performed by an external vendor, independence must be documented and accepted by the OCISO. Independence is waived for all annual testing (i.e., testing can be internally performed).*

8.1.8 CA-9 Internal System Connections

Control:

- a. Authorize internal connections of [*other GSA components using a secure methodology providing security commensurate with the acceptable level of risk as defined in the SSPP and limits access to the information needed by the connected component*] to the system;
- b. Document, for each internal connection, the interface characteristics, security and privacy requirements, and the nature of the information communicated;

- c. Terminate internal system connections after [*15 minutes of inactivity for non-persistent connections*]; and
- d. Review [*annually (or as the SSPP is reviewed and updated)*] the continued need for each internal connection.

GSA Implementation Guidance:

If GSA systems interconnect, they must connect using a secure methodology that provides security commensurate with the acceptable level of risk as defined in the SSPP and that limits access only to the information needed by the other system. GSA is developing an IT Security Procedural Guide: Managing Information Exchange Security to define how information between GSA systems and between GSA and external systems must be secured and agreements approved when necessary. This guide will clarify the requirements for internal system connections.

Vendor/Contractor System Considerations: *Vendors/contractors must adhere to GSA policies and guides and the control requirements regarding internal system connections.*

8.2 Planning (PL)

8.2.1 PL-1 Policy and Procedures

Control:

- a. Develop, document, and disseminate to [*personnel with IT security responsibilities as defined in GSA CIO Order 2100.1*]:
 1. [*Organization-level*] planning policy that:
 - (a) Addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and
 - (b) Is consistent with applicable laws, executive orders, directives, regulations, policies, standards, and guidelines; and
 2. Procedures to facilitate the implementation of the planning policy and the associated planning controls;
- b. Designate an [*CISO*] to manage the development, documentation, and dissemination of the planning policy and procedures;
- c. Review and update the current planning:
 1. Policy [*annually, as part of CIO 2100.1, GSA IT Security Policy*] and following [*changes to Federal or GSA policies, requirements, or guidance*]; and
 2. Procedures [*at least every three (3) years*] and following [*changes to Federal or GSA policies, requirements, or guidance*].

GSA Implementation Guidance:

The GSA security planning policy is defined in GSA Order CIO 2100.1, which addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance regarding the security planning for GSA systems. This policy is consistent with applicable laws, executive orders, directives, regulations, policies, standards, and guidelines. This policy is disseminated GSA-wide via GSA's InSite centralized agency Directives website.

Planning procedures are documented in this guide. The procedures facilitate the implementation of the security planning policy and associated controls. The guide is disseminated GSA-wide via GSA's InSite centralized agency IT Security Procedural Guides website.

The GSA CISO is responsible for managing the development, documentation, and dissemination of all GSA IT security policies procedural guides.

The GSA OCISO is responsible for reviewing and updating CIO 2100.1 annually and following changes to Federal or GSA policies, requirements, or guidance.

The GSA OCISO is responsible for reviewing and updating CIO-IT Security-06-30 and all procedural guides at least every three (3) years and following changes to Federal or GSA policies, requirements, or guidance.

Contractor System Considerations: *Vendors/contractors may defer to the GSA policy and guide or implement their own security planning policies and procedures which comply with GSA's requirements with the approval of the GSA CISO and AO.*

8.2.2 PL-2 System Security and Privacy Plans

Control:

- a. Develop security and privacy plans for the system that:
 1. Are consistent with the organization's enterprise architecture;
 2. Explicitly define the constituent system components;
 3. Describe the operational context of the system in terms of mission and business processes;
 4. Identify the individuals that fulfill system roles and responsibilities;
 5. Identify the information types processed, stored, and transmitted by the system;
 6. Provide the security categorization of the system, including supporting rationale;
 7. Describe any specific threats to the system that are of concern to the organization;
 8. Provide the results of a privacy risk assessment for systems processing personally identifiable information;
 9. Describe the operational environment for the system and any dependencies on or connections to other systems or system components;
 10. Provide an overview of the security and privacy requirements for the system;
 11. Identify any relevant control baselines or overlays, if applicable;
 12. Describe the controls in place or planned for meeting the security and privacy requirements, including a rationale for any tailoring decisions;
 13. Include risk determinations for security and privacy architecture and design decisions;
 14. Include security- and privacy-related activities affecting the system that require planning and coordination with [\[personnel with IT security responsibilities for the system as defined in GSA CIO Order 2100.1 and the GSA Privacy Office \(for systems with Privacy Act data\)\]](#); and
 15. Are reviewed and approved by the authorizing official or designated representative prior to plan implementation.
- b. Distribute copies of the plans and communicate subsequent changes to the plans to [\[personnel with IT security responsibilities for the system as defined in GSA CIO Order 2100.1\]](#);
- c. Review the plans [\[annually\]](#);
- d. Update the plans to address changes to the system and environment of operation or problems identified during plan implementation or control assessments; and
- e. Protect the plans from unauthorized disclosure and modification.

GSA Implementation Guidance:

The focus of this control is to ensure that an SSPP has been developed for the information system that documents the security requirements for the information system, and the implementation status of the security controls that have been assigned to the system as per FIPS 199 impact analysis. All GSA information systems must develop an SSPP when required by GSA's A&A processes described in this guide and GSA's other A&A. GSA's SSPP templates, including associated appendices and attachments, must be used to ensure the control requirements are addressed. Detailed guidance is available through [Section 5](#) of this guide and in the other A&A guides GSA publishes.

SSPPs are distributed to personnel with IT security responsibilities for the system by the system team and ISSO and are required to be uploaded to GSA's Archer GRC tool. SSPPs are required to be reviewed and updated at least annually to address changes to the system, its environment of operation, control monitoring and assessments. SSPP distribution is restricted personnel with IT security responsibilities for the system as defined in GSA CIO Order 2100.1 to protect against unauthorized disclosure and modification.

Contractor System Considerations: *Vendors/contractors must adhere to GSA policies and guides and the control requirements regarding SSPP development, distribution, review, updates, and protection.*

8.2.3 PL-4 Rules of Behavior**Control:**

- a. Establish and provide to individuals requiring access to the system, the rules that describe their responsibilities and expected behavior for information and system usage, security, and privacy;
- b. Receive a documented acknowledgment from such individuals, indicating that they have read, understand, and agree to abide by the rules of behavior, before authorizing access to information and the system;
- c. Review and update the rules of behavior [*at least annually*]; and
- d. Require individuals who have acknowledged a previous version of the rules of behavior to read and re-acknowledge [Selection (one or more): [*annually or when the rules are revised or updated*]].

Control Enhancements:

- (1) Rules of Behavior | Social Media and External Site/Application Usage Restrictions - Include in the rules of behavior, restrictions on:
 - (a) Use of social media, social networking sites, and external sites/applications;
 - (b) Posting organizational information on public websites; and
 - (c) Use of organization-provided identifiers (e.g., email addresses) and authentication secrets (e.g., passwords) for creating accounts on external sites/applications

GSA Implementation Guidance:

GSA has developed GSA Order CIO 2104.1, "GSA Information Technology (IT) General Rules of Behavior". The rules describe a user's responsibilities and expected behavior when using GSA information systems, including use of social media and external sites/applications, posting organizational information on public websites, and using organizational identifiers or authentication secrets when creating accounts on external sites/applications. All GSA IT users must sign the GSA IT General Rules of Behavior for General Users within 90 days of their entry on duty (EoD). GSA does not require the rules be signed before accessing an information

system. GSA OCISO reviews and updates the GSA IT Rules of Behavior for General Users annually. All GSA IT users are required to re-sign the GSA IT Rules of Behavior for General Users annually or when the rules are revised or updated as part of GSA's annual IT Security and Privacy Awareness training.

As per PL-4, Enhancement (1), CIO 2104.1 includes restrictions on the use of social media, social networking, and external sites; guidance on posting organizational information on public websites; and the use of organization-provided identifiers and authentication secrets external sites/applications. GSA Order OSC 2106.2, "GSA Social Media Policy," provides detailed instructions regarding what GSA personnel can and cannot do regarding the use of social media/networking.

Contractor System Considerations: *Vendors/contractors must adhere to the control requirements and GSA rules of behavior regarding accessing GSA systems.*

8.2.4 PL-8 Information Security Architecture

Control:

- a. Develop security and privacy architectures for the system that:
 1. Describe the requirements and approach to be taken for protecting the confidentiality, integrity, and availability of organizational information;
 2. Describe the requirements and approach to be taken for processing personally identifiable information to minimize privacy risk to individuals;
 3. Describe how the architectures are integrated into and support the enterprise architecture; and
 4. Describe any assumptions about, and dependencies on, external systems and services;
- b. Review and update the architectures [*as necessary, and at least annually in conjunction with SSPP reviews/updates*] to reflect changes in the enterprise architecture; and
- c. Reflect planned architecture changes in security and privacy plans, Concept of Operations (CONOPS), criticality analysis, organizational procedures, and procurements and acquisitions.

GSA Implementation Guidance:

[CIO-IT Security-19-95](#): Security Engineering Architecture Reviews describes GSA's processes for ensuring systems are built in accordance with the Security Engineering Framework to ensure security architectures meet GSA's security requirements and protect GSA systems and data. It includes checklist items that ensure a system's security architecture aligns with GSA's Enterprise Architecture and its approved IT standards and identifies how non-IT standards can be proposed for inclusion in the standards. CIO-IT Security 19-95 includes checklist items regarding the use of external services, systems, and interconnections to GSA.

Note: MV 23-02, "Ensuring Only Approved Software is Acquired and Used at GSA," states that GSA Order 2160.1, "GSA Information Technology (IT) Standards Profile," will be updated by June 12, 2023, to align with OMB M-22-18, "Enhancing the Security of the Software Supply Chain through Secure Software Development Practices." The updated policy will reflect GSA's process for collecting, reviewing, retaining, and monitoring attestation information from software producers. GSA CIO-IT Security-09-48: Security and Privacy Requirements for IT Acquisition Efforts will also be updated to require attestation information for Contractor/Vendor systems.

CIO-IT Security-19-95 describes the process to support utilization of new and emergent technologies or when systems undergo major architectural changes to ensure such systems are designed and built or continue to be secure. The system ISSO has the responsibility to notify the ISE Division when changes occur and, as part of the system's annual SSPP annual update, consider if any changes have occurred that require architectural review.

System Owners are responsible for ensuring all security architecture changes are reflected in their System Security and Privacy Plan (SSPP), Concept of Operations (CONOPS), criticality analysis, and organizational procedures and procurements/acquisitions (as applicable and/or annually, as part of the system's annual SSPP review/update processing).

Contractor System Considerations: *System Owners, ISSOs, and ISSMs are responsible for ensuring their system architectures are submitted for gaining initial Security and Privacy architectural approval and when significant changes to a system's architecture are planned. System Owners are responsible for ensuring all security architecture changes are reflected in their SSPP, Concept of Operations (CONOPS), criticality analysis, and organizational procedures and procurements/acquisitions, as applicable, and/or annually as part of the system's annual SSPP review/update processing.*

8.2.5 PL-9 Central Management

Control:

Centrally manage [[common and hybrid security and privacy controls as identified in CIO-IT Security-18-90, Common Control Catalog \(CCC\)](#)].

GSA Implementation Guidance:

Enterprise common and hybrid controls are described in the CCC. GSA system owners, data owners, ISSOs, and ISSMs are responsible for coordinating the inheritance of controls identified in the CCC for their FISMA systems. For hybrid controls, they must implement the system specific portions of the controls as described in the CCC.

Contractor System Considerations: *Expectations for vendor/contractor systems are specified in the CCC. Most of the controls in the CCC are system-specific or hybrid for vendor/contractor systems, therefore central management of those controls is the responsibility of the vendor/contractor.*

8.2.6 PL-10 Baseline Selection

Control:

Select a control baseline for the system.

GSA Implementation Guidance:

A system's FIPS 199 security categorization and PTA determine the initial set of NIST SP 800-53 control requirements an information system must implement. Baseline selection is also dependent upon the A&A process followed per [Section 2](#): Identifying Appropriate ATU or ATO Process, GSA's Control Tailoring Workbook (CTW), and [Section 9](#): Additional NIST Controls Required by GSA further determine the specific set of controls the system must implement.

The System Owner collaborates with the AO, ISSM, ISSO, and Privacy Team as necessary to complete the control selection task.

Contractor System Considerations: Vendor/contractor systems must follow the same process as described above to complete the control baseline selection.

8.2.7 PL-11 Baseline Tailoring

Control:

Tailor the selected control baseline by applying specified tailoring actions.

GSA Implementation Guidance:

Once the security control baseline for a system is established, tailoring of those controls commences. A system's Baseline Tailoring tasks include:

- Determining the common controls the system inherits;
- Assigning values to any parameters identified as being left up to the system for assignment and requiring GSA AO and CISO approval;
- Determining if any compensating or supplemental controls are required to address unique organizational and/or system specific needs. These needs may be based on a risk assessment (either formal or informal), local conditions including environment of operation, organization-specific security requirements, specific threat information, cost-benefit analyses, or special circumstances.

System specific justifications or rationale for tailoring actions is required, especially where the CISO and AO must approve assignments and if any controls are identified as not applicable to the system or its environment.

System teams must complete a CTW and provide it as an attachment to the SSPP. The CTW identifies the GSA defined values for NIST SP 800-53 control assignments and selections. The selected security controls, including all controls or enhancements selected above the baseline for the information system, must be documented in the SSPP. Both the SSPP and the CTW identify parameter assignments or selections deferred to the SSO or contractor for recommendation and approval by the GSA AO and CISO. The CTW contains columns for identifying the defined values and GSA approval of the values.

Contractor System Considerations: System Owners are to collaborate with the ISSM, ISSO, Privacy Team as necessary, and other System Owners (regarding common/hybrid controls) to complete their assigned system's control tailoring requirements.

8.3 Risk Assessment (RA)

8.3.1 RA-1 Policy and Procedures

Control:

- a. Develop, document, and disseminate to [\[personnel with IT security responsibilities as defined in GSA CIO Order 2100.1\]](#):
 1. [\[Organization-level\]](#) risk assessment policy that:
 - (a) Addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and
 - (b) Is consistent with applicable laws, executive orders, directives, regulations, policies, standards, and guidelines; and
 2. Procedures to facilitate the implementation of the planning policy and the associated risk assessment controls;

- b. Designate an [*CISO*] to manage the development, documentation, and dissemination of the risk assessment policy and procedures; and
- c. Review and update the current risk assessment:
 1. Policy [*annually, as part of CIO 2100.1, GSA IT Security Policy*] and following [*changes to Federal or GSA policies, requirements, or guidance*]; and
 2. Procedures [*at least every three (3) years*] and following [*changes to Federal or GSA policies, requirements, or guidance*].

GSA Implementation Guidance:

The GSA risk assessment policy is defined in the GSA Order CIO 2100.1, which addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance for risk assessment activities. This policy is consistent with applicable laws, executive orders, directives, regulations, policies, standards, and guidelines. This policy is disseminated GSA-wide via GSA's InSite centralized agency Directives website.

Risk assessment procedures are documented in CIO-IT Security-06-30: Managing Enterprise Cybersecurity Risk and other procedural guides referenced in it. The procedures facilitate the implementation of the risk assessment policy and associated controls. All GSA procedural guides are disseminated GSA-wide via GSA's InSite centralized agency IT Security Procedural Guides website.

The GSA CISO is responsible for managing the development, documentation, and dissemination of all GSA IT security policies procedural guides.

The GSA OCISO is responsible for reviewing and updating CIO 2100.1 annually and following changes to Federal or GSA policies, requirements, or guidance.

The GSA OCISO is responsible for reviewing and updating CIO-IT Security-06-30 and all procedural guides at least every three (3) years and following changes to Federal or GSA policies, requirements, or guidance.

Contractor System Considerations: *Vendors/Contractors must use GSA policies and guides regarding risk assessment policies and procedures. They may supplement them with their own risk assessment policies and procedures with the approval of the GSA CISO and AO.*

8.3.2 RA-2 Security Categorization

Control:

- a. Categorize the system and information it processes, stores, and transmits;
- b. Document the security categorization results, including supporting rationale, in the security plan for the system; and
- c. Verify that the authorizing official or authorizing official designated representative reviews and approves the security categorization decision.

GSA Implementation Guidance:

GSA system owners, data owners, ISSOs, and ISSMs are required to follow the processes and procedures described in:

- [Section 5.2.2](#): System Categorization of this guide for determining the security categorization of their information and information systems; and

- [Section 5.2.3](#): System Categorization Review and Approval of this guide for approval of the security categorization of their information and information systems.

Contractor System Considerations: *Vendor/contractor systems must follow the same processes and procedures for determining the security categorization of their information and information systems and its approval as described above.*

8.3.3 RA-3 Risk Assessment

Control:

- a. Conduct a risk assessment, including:
 1. Identifying threats to and vulnerabilities in the system;
 2. Determining the likelihood and magnitude of harm from unauthorized access, use, disclosure, disruption, modification, or destruction of the system, the information it processes, stores, or transmits, and any related information; and
 3. Determining the likelihood and impact of adverse effects on individuals arising from the processing of personally identifiable information;
- b. Integrate risk assessment results and risk management decisions from the organization and mission or business process perspectives with system-level risk assessments;
- c. Document risk assessment results in [[a security assessment report \(SAR\) or as specified in CIO-IT Security-06-30 and GSA's other Assessment and Authorization processes identified therein](#)];
- d. Review risk assessment results [[as specified in CIO-IT Security-06-30 and GSA's other Assessment and Authorization processes identified therein](#)];
- e. Disseminate risk assessment results to [[personnel with risk assessment/management responsibilities as defined in GSA CIO Order 2100.1](#)]; and
- f. Update the risk assessment [[as specified in CIO-IT Security-06-30 and GSA's other Assessment and Authorization processes identified therein](#)] or when there are significant changes to the system, its environment of operation, or other conditions that may impact the security or privacy state of the system.

Control Enhancements:

- (1) Risk Assessment | Supply Chain Risk Assessment –
 - (a) Assess supply chain risks associated with [[GSA SSO or Contractor recommended systems, system components, and system services as approved by the CISO and AO](#)]; and
 - (b) Update the supply chain risk assessment [[GSA SSO or Contractor recommended frequency as approved by the CISO and AO](#)], when there are significant changes to the relevant supply chain, or when changes to the system, environments of operation, or other conditions may necessitate a change in the supply chain.

GSA Implementation Guidance:

CIO 2100.1 and this guide require risk assessments to be performed as part of the initial assessment and authorization (A&A) of GSA information systems, including identifying threats and likelihoods of harm and impact to systems.

CIO-IT Security-18-91 describes how GSA integrates risk management across the organizational, mission/business, and information system levels.

This guide requires a Security Assessment Report (SAR), or similar assessment of risk be prepared based on which A&A process a system uses.

This guide requires risk assessments to be reviewed in accordance with the GSA authorization process used. Risk assessment results (e.g., the SAR) are provided to security personnel responsible for the security of a GSA system as part of the A&A package during initial authorization and subsequent updates to the system's authorization and operation. Assessments must be updated based on which A&A process a system uses and if a significant change to the system, its environment, or its risk posture is identified during monitoring or annual updates of the system's A&A package.

The system ISSO, ISSM, and System Owner are responsible for ensuring their system risk assessments are reviewed, updated, and disseminated in accordance with GSA policies and guides.

As per RA-3, Enhancement (1), the OCISO Cyber Supply Chain Risk Management (C-SCRM) team develops, maintains, and annually updates a list of critical suppliers for GSA-IT. The list is based on input from various sources for GSA-IT managed systems. It includes software inventories, hardware inventories, and financials related to acquisitions. Supply chain risks that are unique for the most critical vendors, are then incorporated into final determinations. For the resultant set of critical vendors. Supplier assessments are conducted, and significant risks are addressed. The specific controls for maintaining the critical supplier list and conducting supplier reviews are identified within the C-SCRM Program's Standard Operating Procedures (SOPs).

Per OMB M-22-18, "Enhancing the Security of the Software Supply Chain through Secure Software Development Practices," and GSA Acquisition Letter MV-2023-02, "Ensuring Only Approved Software is Acquired and Used at GSA," starting not later than June 12, 2023, software producers must provide a self-attestation document attesting to their conformance to NIST guidance⁵ on secure software development practices using a form that will be provided by GSA. CIO-IT Security-09-48: Security and Privacy Requirements for IT Acquisition Efforts will also be updated to require attestation information for Contractor/Vendor systems.

- For GSA managed systems, the system owner is responsible for collecting attestations for the third party software they use as part of the IT Standards approval process.
- For contractor systems, the contractor must provide the attestations to GSA as part of the IT Standards approval process.

Contractor System Considerations: *Vendor/contractor systems must follow the same processes and procedures for conducting risk assessments as described above. System Owners must establish a process and perform system-specific or organization-wide Supplier Assessments and Reviews consistent with NIST SP 800-161, Revision 1, "Cybersecurity Supply Chain Risk Management Practices for Systems and Organizations" and CIO IT Security-18 90: Common Control Catalog (CCC).*

8.3.4 RA-5 Vulnerability Monitoring and Scanning

Control:

⁵ [NIST SP 800-218](#), "Secure Software Development Framework (SSDF)," and NIST [Software Supply Chain Security Guidance](#).

- a. Monitor and scan for vulnerabilities in the system and hosted applications [*weekly authenticated scans for operating systems (OS)-including databases, monthly unauthenticated scans for web application, annual authenticated scans for web applications*] and when new vulnerabilities potentially affecting the system are identified and reported;
- b. Employ vulnerability monitoring tools and techniques that facilitate interoperability among tools and automate parts of the vulnerability management process by using standards for:
 1. Enumerating platforms, software flaws, and improper configurations;
 2. Formatting checklists and test procedures; and
 3. Measuring vulnerability impact;
- c. Analyze vulnerability scan reports and results from vulnerability monitoring;
- d. Remediate legitimate vulnerabilities [
 - (1) *BOD Timelines*
 - (a) *Within 14 days for vulnerabilities added to CISA's KEV Catalog with a CVE date post FY21.*
 - (b) *Per the CISA KEV catalog date or GSA Standard timelines below, whichever is earlier, for vulnerabilities in the CISA KEV catalog with a CVE date in FY21 or earlier.*
 - (c) *Within 15 days for Critical (Very High) vulnerabilities for Internet-accessible systems or services.*
 - (2) *GSA Standard Timelines*
 - (a) *Within 30 days for Critical (Very High) and High vulnerabilities.*
 - (b) *Within 90 days for Moderate vulnerabilities.*
 - (c) *Within 120 days for Low vulnerabilities for Internet-accessible systems/services.*
 in accordance with an organizational assessment of risk;
- e. Share information obtained from the vulnerability monitoring process and control assessments with [*ISSOs*] to help eliminate similar vulnerabilities in other systems; and
- f. Employ vulnerability monitoring tools that include the capability to readily update the vulnerabilities to be scanned.

Control Enhancements:

- (2) Vulnerability Monitoring and Scanning | Update Vulnerabilities to be Scanned – Update the system vulnerabilities to be scanned [*continuously – before each scan*].
- (4) Vulnerability Monitoring and Scanning | Discoverable Information – Determine information about the system that is discoverable and take [*GSA SSO recommended and GSA CISO and AO approved corrective actions*]
- (5) Vulnerability Monitoring and Scanning | Privileged Access - Implement privileged access authorization to [*all information system components as applicable (e.g., OS, DB, Web App, etc.)*] for [*all vulnerability scanning activities*].
- (11) Vulnerability Monitoring and Scanning | Public Disclosure Program – Establish a public reporting channel for receiving reports of vulnerabilities in organizational systems and system components.

GSA Implementation Guidance:

CIO-IT Security-17-80: Vulnerability Management Process describes the requirements for vulnerability scanning of GSA information systems and applications. It also describes an ad hoc process which can be used to scan for new vulnerabilities. CIO-IT Security-17-80 describes the scanning tools and techniques GSA uses to automate, as much as is possible, the scanning of

GSA information systems and applications. It includes a description of the use of the Common Vulnerability Scoring System (CVSS) for assigning risks for tools that support CVSS. CIO-IT Security-17-80 assigns ISSOs the responsibility to evaluate and analyze scan reports and results in collaboration with information system personnel. GSA Order CIO 2100.1, this guide, and CIO-IT Security-17-80 all require remediation based on the time periods in the RA-5, Part b parameter. Tools used at GSA can be readily updated to identify new or newly exploited vulnerabilities, dependent upon the ability of the tool to identify vulnerabilities on assets.

CIO-IT Security-17-80 describes how the different reports or dashboards are shared with ISSOs, ISSMs, and executives as necessary. Reports such as the Top 10 vulnerability summaries can be used to identify systemic issues across GSA.

As per RA-5, Enhancement (2), the scanning tools used by GSA's ISO Division are scheduled for auto-updates daily and update the tool configuration as necessary before running scans.

As per RA-5, Enhancement (4), GSA's ISO Division shares reports and dashboards with ISSOs who must coordinate with system personnel to take corrective actions to restrict discoverable information about systems as necessary.

As per RA-5, Enhancement (5), GSA FIPS 199 High Impact systems must collaborate with the ISO Division to implement privileged access to system assets in support of the vulnerability scanning capabilities described in CIO-IT Security-17-80.

As per RA-5, Enhancement (11), GSA's [Vulnerability Disclosure Policy](#) establishes GSA's public reporting channel for receiving reports of vulnerabilities in organizational systems and system components.

Contractor System Considerations: *Vendors/contractors must adhere to GSA policies and guides and comply with the control requirements vulnerability monitoring and scanning.*

8.3.5 RA-7 Risk Response

Control: Respond to findings from security and privacy assessments, monitoring, and audits in accordance with organizational risk tolerance.

GSA Implementation Guidance:

ISSOs, System Owners, and system, network, and database administrators, will coordinate and perform remediation actions based upon the results of ongoing monitoring activities, assessment of risk, and outstanding items in the system's POA&M as described in [Section 5.7.3](#) of this guide.

Contractor System Considerations: *Vendors/contractors must adhere to GSA policies and guides and comply with the control requirements regarding risk response.*

8.3.6 RA-8 Privacy Impact Assessments

Control: Conduct privacy impact assessments for systems, programs, or other activities before:

- a. Developing or procuring information technology that processes personally identifiable information; and
- b. Initiating a new collection of personally identifiable information that:
 1. Will be processed using information technology; and

2. Includes personally identifiable information permitting the physical or virtual (online) contacting of a specific individual, if identical questions have been posed to, or identical reporting requirements imposed on, ten or more individuals, other than agencies, instrumentalities, or employees of the federal government.

Note: RA-8 is included in all FIPS 199 Baselines to ensure all systems complete a Privacy Threshold Assessment (PTA) to determine if a Privacy Impact Assessment (PIA) is required.

GSA Implementation Guidance:

GSA's [Privacy Act Program website](#) provides guidance on conducting Privacy Impact Assessments (PIAs), including links to GSA Order CIO 1878.3, "Developing and Maintaining Privacy Threshold Assessments (PTAs), PIAs, Privacy Act Notices, and System of Records Notices," and templates for [PTAs](#) and [PIAs](#). The program and policy require developing PTAs and PIAs, when applicable, to identify PII before the development or acquisition of a new information system and to review and update them in alignment with the systems ATO authorization cycle and/or when there is a significant change to the system.

Contractor System Considerations: *Vendors/contractors must adhere to GSA policies and guides and comply with the control requirements regarding PTAs and PIAs.*

8.3.7 RA-9 Criticality Analysis

Control: Identify critical system components and functions by performing a criticality analysis for *[all systems as part of their Business Impact Analysis (BIA)]* at *[initial system design and development and throughout its lifecycle to ensure any criticality changes are identified]*.

GSA Implementation Guidance:

GSA system owners, data owners, ISSOs, and ISSMs must identify the criticality of components as part of the Business Impact Analysis (BIA) included in Contingency Planning (CP) activities. Throughout a system's lifecycle as changes to the system occur, they must be analyzed to determine if the criticality of the system or its components has changed. If changes have occurred, the BIA and CP Plan for the system must be updated.

Contractor System Considerations: *Vendors/contractors must adhere to GSA policies and guides and comply with the control requirements regarding criticality analysis.*

9 Additional NIST Controls Required by GSA

GSA requires certain controls be a part of a systems control set in accordance with the applicability listed in the following table.

Table 9-1: GSA Additional NIST Control Requirements

No.	Control No.	Control Name/Statement	Control Applicability
1	CA-2(1)	<p>Control Assessments Independent Assessors Employ independent assessors or assessment teams to conduct control assessments.</p> <p>NOTE: Assessors are independent if they do not: (i) have a mutual or conflicting interest with the organizations where the assessments are being conducted; (ii) assess their own work; (iii) act as management or employees of the organizations they are assessing; or (iv) place themselves in positions of advocacy for the organizations acquiring their services.</p>	<p>In addition to the NIST requirement for FIPS 199 Moderate and High systems:</p> <ul style="list-style-type: none"> FIPS 199 Low external vendor/contractor systems
2	CA-8	<p>Penetration Testing Conduct penetration testing [<i>during A&A efforts and annually thereafter</i>] on [<i>all Internet accessible, FIPS 199 High impact, and High Value Asset (HVA) information systems</i>].</p>	<p>In addition to the NIST requirement for FIPS 199 High systems:</p> <ul style="list-style-type: none"> All Internet accessible systems HVA information systems MiSaaS A&A systems <p>(See Section 8.1.7)</p>
3	CA-8(1)	<p>Penetration Testing Independent Penetration Testing Agent or Team. Employ an independent penetration testing agent or team to perform penetration testing on the system or system components.</p> <p>NOTE: <i>Independence is waived for all annual testing (i.e., testing can be internally performed)</i></p>	<p>In addition to the NIST requirement for FIPS 199 High systems:</p> <ul style="list-style-type: none"> All Internet accessible systems HVA information systems MiSaaS A&A systems <p>(See Section 8.1.7)</p>
4	CM-2(2)	<p>Baseline Configuration Automation Support for Accuracy and Currency Maintain the currency, completeness, accuracy, and availability of the baseline configuration of the system using [<i>automated mechanisms as identified in the SSPP/CM Plan</i>].</p>	<p>In addition to the NIST requirement for FIPS 199 Moderate and High systems:</p> <ul style="list-style-type: none"> Lightweight A&A systems MiSaaS A&A systems OA Program
5	CM-6(1)	<p>Configuration Settings Automated Management, Application, and Verification Manage, apply, and verify configuration settings for [<i>all operating systems</i>] using [<i>automated mechanisms as documented in the SSPP/CM Plan</i>].</p>	<p>In addition to the NIST requirement for FIPS 199 High systems:</p> <ul style="list-style-type: none"> FIPS 199 Moderate systems Lightweight A&A systems MiSaaS A&A systems OA Program

No.	Control No.	Control Name/Statement	Control Applicability
6	CM-8(2)	System Component Inventory Automated Maintenance Maintain the currency, completeness, accuracy, and availability of the inventory of system components using <i>[automated mechanisms as documented in the SSPP/CM Plan]</i> .	In addition to the NIST requirement for FIPS 199 High systems: <ul style="list-style-type: none"> • FIPS 199 Moderate systems • Lightweight A&A systems • OA Program
7	CM-8(6)	System Component Inventory Assessed Configurations and Approved Deviations Include assessed component configurations and any approved deviations to current deployed configurations in the system component inventory.	<ul style="list-style-type: none"> • FIPS 199 Moderate and High systems
8	CM-8(7)	System Component Inventory Centralized Repository Provide a centralized repository for the inventory of system components.	<ul style="list-style-type: none"> • FIPS 199 Moderate and High systems
9	PE-8(3)	Visitor Access Records Limit Personally Identifiable Information Elements Limit personally identifiable information contained in visitor access records to the following elements identified in the privacy risk assessment: <i>[individual visitor's name]</i> .	<ul style="list-style-type: none"> • FIPS 199 Moderate and High systems
10	PL-8	Security and Privacy Architectures <ol style="list-style-type: none"> a. Develop security and privacy architectures for the system that: <ol style="list-style-type: none"> 1. Describe the requirements and approach to be taken for protecting the confidentiality, integrity, and availability of organizational information; 2. Describe the requirements and approach to be taken for processing personally identifiable information to minimize privacy risk to individuals; 3. Describe how the architectures are integrated into and support the enterprise architecture; and 4. Describe any assumptions about, and dependencies on, external systems and services; b. Review and update the architectures <i>[as necessary, and at least annually in conjunction with SSPP reviews/updates]</i> to reflect changes in the enterprise architecture; and c. Reflect planned architecture changes in security and privacy plans, Concept of Operations (CONOPS), criticality analysis, organizational procedures, and procurements and acquisitions. 	In addition to the NIST requirement for FIPS 199 Moderate and High systems: <ul style="list-style-type: none"> • FIPS 199 Low systems • Lightweight A&A systems • OA Program
11	PL-9	Central Management Centrally manage <i>[common and hybrid security and privacy controls as identified in CIO-IT Security-18-90: Common Control Catalog (CCC)]</i> .	<ul style="list-style-type: none"> • All systems

No.	Control No.	Control Name/Statement	Control Applicability
12	RA-8	<p>Privacy Impact Assessments Conduct privacy impact assessments for systems, programs, or other activities before:</p> <ol style="list-style-type: none"> a. Developing or procuring information technology that processes personally identifiable information; and b. Initiating a new collection of personally identifiable information that: <ol style="list-style-type: none"> 1. Will be processed using information technology; and 2. Includes personally identifiable information permitting the physical or virtual (online) contacting of a specific individual, if identical questions have been posed to, or identical reporting requirements imposed on, ten or more individuals, other than agencies, instrumentalities, or employees of the federal government. 	<ul style="list-style-type: none"> • All systems <p><i>Note: RA-8 is included in all FIPS 199 Baselines to ensure all systems complete a PTA to determine if a PIA is required. If the PTA determines a PIA is not required, document RA-8 in the SSPP as "Implemented" and state in parts a and b "PTA completed, a PIA is not required."</i></p>
13	SA-3(2)	<p>System Development Life Cycle Use of Live or Operational Data (a) Approve, document, and control the use of live data in preproduction environments for the system, system component, or system service; and (b) Protect preproduction environments for the system, system component, or system service at the same impact or classification level as any live data in use within the preproduction environments.</p>	<ul style="list-style-type: none"> • All systems
16	SC-8(1)	<p>Transmission Confidentiality and Integrity Cryptographic Protection Implement cryptographic mechanisms to <i>[prevent unauthorized disclosure of information and detect changes to information]</i> during transmission.</p>	<p>In addition to the NIST requirement for FIPS 199 Moderate and High systems:</p> <ul style="list-style-type: none"> • FIPS 199 Low systems • Lightweight A&A systems • MiSaaS A&A systems
17	SC-28(1)	<p>Protection of Information at Rest Cryptographic Protection Implement cryptographic mechanisms to prevent unauthorized disclosure and modification of the following information at rest on <i>[every asset of the system everywhere, including databases and applications]</i>: <i>[(1) Personally identifiable information; (2) Payment Card Industry data; (3) Authenticators, including but not limited to passwords, keys, and tokens; (4) business sensitive data as determined by the data owner and approved by the GSA CISO and AO]</i></p>	<p>In addition to the NIST requirement for FIPS 199 Moderate and High systems:</p> <ul style="list-style-type: none"> • FIPS 199 Low systems • Lightweight A&A systems • MiSaaS A&A systems

No.	Control No.	Control Name/Statement	Control Applicability
18	SI-2(3)	<p>Flaw Remediation Time to Remediate Flaws / Benchmarks for Corrective Actions</p> <p>a. Measure the time between flaw identification and flaw remediation; and</p> <p>b. Establish the following benchmarks for taking corrective actions [</p> <p><i>(1) BOD Timelines</i></p> <p><i>(a) Within 14 days for vulnerabilities added to CISA ' s KEV Catalog with a CVE date post FY21.</i></p> <p><i>(b) Per the CISA KEV catalog date or GSA Standard timelines below, whichever is earlier, for vulnerabilities in the CISA KEV catalog with a CVE date in FY21 or earlier.</i></p> <p><i>(c) Within 15 days for Critical (Very High) vulnerabilities for Internet-accessible systems or services.</i></p> <p><i>(2) GSA Standard Timelines</i></p> <p><i>(a) Within 30 days for Critical (Very High) and High vulnerabilities.</i></p> <p><i>(b) Within 90 days for Moderate vulnerabilities.</i></p> <p><i>(c) Within 120 days for Low vulnerabilities for Internet-accessible systems/services.]</i></p>	<ul style="list-style-type: none"> • FIPS 199 Moderate and High Systems • OA Program

10 Summary

Managing enterprise-level risk through a system life cycle perspective is a departure from the traditional view of security authorization as a static, procedural process. GSA has integrated EO 13800 and the NIST CSF throughout this guide by showing how they align with GSA's agency-wide use of the NIST RMF security authorization processes. The policies and procedures outlined in this guide provide an effective approach to system security authorization that is more dynamic and more capable of managing information system-related security risks across a diverse enterprise.

All GSA information systems must undergo a security control assessment and be authorized to operate according to their specific A&A process. GSA's standard A&A process requires A&A at least every three (3) years or whenever there is a significant change to the system's security posture in accordance with NIST SP 800-37.

GSA contractors and Federal employees should use this guide and the noted references prior to selecting and performing a security authorization process. Where there is a conflict between NIST guidance and GSA guidance, contact OCISO at ispcompliance@gsa.gov.

Note: In [Appendix E](#), Table E-1, GSA has identified a list of Showstopper items. Showstopper items and associated NIST controls, if not fully implemented, may keep a system from receiving a full ATO.

Appendix A: CSF Function, Category, and Subcategory Definitions

The five CSF core function definitions are:

- **Identify (ID):** Develop an organizational understanding to manage cybersecurity risk to systems, people, assets, data, and capabilities. The activities in the Identify Function are foundational for effective use of the Framework. Understanding the business context, the resources that support critical functions and the related cybersecurity risks enables an organization to focus and prioritize its efforts, consistent with its risk management strategy and business needs. Examples of outcome Categories within this Function include: Asset Management; Business Environment; Governance; Risk Assessment; and Risk Management Strategy.
- **Protect (PR):** Develop and implement appropriate safeguards to ensure delivery of critical services. The Protect Function supports the ability to limit or contain the impact of a potential cybersecurity event. Examples of outcome Categories within this Function include: Identity Management and Access Control; Awareness and Training; Data Security; Information Protection Processes and Procedures; Maintenance; and Protective Technology.
- **Detect (DE):** Develop and implement appropriate activities to identify the occurrence of a cybersecurity event. The Detect Function enables timely discovery of cybersecurity events. Examples of outcome Categories within this Function include: Anomalies and Events; Security Continuous Monitoring; and Detection Processes.
- **Respond (RS):** Develop and implement appropriate activities to take action regarding a detected cybersecurity incident. The Respond Function supports the ability to contain the impact of a potential cybersecurity incident. Examples of outcome Categories within this Function include: Response Planning; Communications; Analysis; Mitigation; and Improvements.
- **Recover (RC):** Develop and implement appropriate activities to maintain plans for resilience and to restore any capabilities or services that were impaired due to a cybersecurity incident. The Recover Function supports timely recovery to normal operations to reduce the impact from a cybersecurity incident. Examples of outcome Categories within this Function include: Recovery Planning; Improvements; and Communications.

Table A-1 lists how NIST SP 800-37, Revision 2 maps the CSF functions listed above to the RMF steps. CSF category/subcategory identifiers are included in italics and parentheses after RMF tasks based on the task outcome tables in NIST SP 800-37. NIST identified some mappings to be to a Profile or to Implementation Tiers which are included in the table.

Table A-1: NIST CSF Functions Mapped to NIST SP 800-37 RMF Steps

CSF Function	Mapped RMF Steps
Identify	<p>Prepare Step: Task P-1: Risk Management Roles (<i>ID.AM, ID.GV-2</i>) Task P-2: Risk Management Strategy (<i>ID.RM, ID.SC</i>) Task P-3: Risk Assessment – Organization (<i>ID.RM, ID.SC</i>) Task P-6: Impact-Level Prioritization (Optional) (<i>ID.AM-5</i>) Task P-7: Continuous Monitoring Strategy – Organization (<i>DE.CM, ID.SC-4</i>) Task P-8: Mission or Business Focus (<i>Profile; Implementation Tiers, ID.BE</i>) Task P-9: System Stakeholders (<i>ID.AM; ID.BE</i>) Task P-10: Asset Identification (<i>ID.AM</i>) Task P-11: Authorization Boundary (<i>N/A</i>) Task P-12: Information Types (<i>ID.AM-5</i>) Task P-13: Information Life Cycle (<i>ID.AM-3, ID.AM-4</i>) Task P-14: Risk Assessment – System (<i>ID.RA, ID.SC-2</i>) Task P-15 Requirements Definition (<i>ID.GV, PR.IP</i>) Task P-16: Enterprise Architecture (<i>N/A</i>) Task P-17: Requirements Allocation (<i>ID.GV</i>) Task P-18: System Registration (<i>ID.GV</i>)</p> <p>Categorize Step: Task C-1: System Description (<i>Profile</i>) Task C-2: Security Categorization (<i>ID.AM-1, ID.AM-2, ID.AM-3, ID.AM-4, ID.AM-5, Profile</i>) Task C-3: Security Categorization Review and Approval (<i>N/A</i>)</p> <p>Select Step: Task S-1: Control Selection (<i>Profile</i>) Task S-2: Control Tailoring (<i>Profile</i>) Task S-3: Control Allocation (<i>Profile, PR.IP</i>) Task S-4: Documentation of Planned Control Implementations (<i>Profile</i>) Task S-5: Continuous Monitoring Strategy – System (<i>ID.GV, DE.CM</i>)</p> <p>Assess Step: Task A-6: Plan of Action and Milestones (<i>ID.RA-6</i>)</p> <p>Authorize Step: Task R-3: Risk Response (<i>ID.RA-6</i>) Task R-5: Authorization Reporting (<i>N/A</i>)</p> <p>Monitor Step: Task M-1: System and Environment Changes (<i>DE.CM, ID.GV</i>) Task M-2: Ongoing Assessments (<i>ID.SC-4</i>) Task M-5: Security and Privacy Reporting (<i>N/A</i>)</p>
Protect	<p>Prepare Step: Task P-15 Requirements Definition (<i>ID.GV, PR.IP</i>)</p> <p>Select Step: Task S-1: Control Selection (<i>Profile</i>) Task S-2: Control Tailoring (<i>Profile</i>) Task S-3: Control Allocation (<i>Profile, PR.IP</i>) Task S-4: Documentation of Planned Control Implementations (<i>Profile</i>)</p> <p>Implement Step: Task I-1: Control Implementation (<i>PR.IP-1, PR.IP-2</i>) Task I-2: Update Control Implementation Information (<i>PR.IP-1, Profile</i>)</p> <p>Authorize Step: Task R-5: Authorization Reporting (<i>N/A</i>)</p> <p>Monitor Step:</p>

CSF Function	Mapped RMF Steps
	Task M-5: Security and Privacy Reporting (<i>N/A</i>)
Detect	<p>Prepare Step: Task P-7 Continuous Monitoring Strategy – Organization Task P-15 Requirements Definition (<i>ID.GV, PR.IP</i>)</p> <p>Select Step: Task S-1: Control Selection (<i>Profile</i>) Task S-2: Control Tailoring (<i>Profile</i>) Task S-4: Documentation of Planned Control Implementations (<i>Profile</i>) Task S-5: Continuous Monitoring Strategy – System (<i>ID.GV, DE.CM</i>)</p> <p>Authorize Step: Task R-5: Authorization Reporting (<i>N/A</i>)</p> <p>Monitor Step: Task M-1: System and Environment Changes (<i>DE.CM, ID.GV</i>) Task M-5: Security and Privacy Reporting (<i>N/A</i>)</p>
Respond	<p>Prepare Step: Task P-15 Requirements Definition (<i>ID.GV, PR.IP</i>)</p> <p>Select Step: Task S-1: Control Selection (<i>Profile</i>) Task S-2: Control Tailoring (<i>Profile</i>) Task S-4: Documentation of Planned Control Implementations (<i>Profile</i>)</p> <p>Authorize Step: Task R-5: Authorization Reporting (<i>N/A</i>)</p> <p>Monitor Step: Task M-3: Ongoing Risk Response (<i>RS.AM</i>) Task M-4: Authorization Package Updates (<i>RS.IM</i>) Task M-5: Security and Privacy Reporting (<i>N/A</i>)</p>
Recover	<p>Prepare Step: Task P-15 Requirements Definition (<i>ID.GV, PR.IP</i>)</p> <p>Select Step: Task S-1: Control Selection Task S-2: Control Tailoring Task S-4: Documentation of Planned Control Implementations</p> <p>Authorize Step: Task R-5: Authorization Reporting</p> <p>Monitor Step: Task M-5: Security and Privacy Reporting (<i>N/A</i>)</p>
N/A	<p>Prepare Step: Task P-4: Organizationally – Tailored Control Baselines and Cybersecurity Framework Profiles (Optional) (<i>Profile</i>) Task P-5: Common Control Identification (<i>N/A</i>)</p> <p>Select Step: Task S-6: Plan Review and Approval (<i>N/A</i>)</p> <p>Assess Step: Task A-1: Assessor Selection (<i>N/A</i>) Task A-2: Assessment Plan (<i>N/A</i>) Task A-3: Control Assessments (<i>N/A</i>) Task A-4: Assessment Reports (<i>N/A</i>) Task A-5: Remediation Actions (<i>Profile</i>)</p> <p>Authorize Step: Task R-1: Authorization Package Task R-2: Risk Analysis and Determination Task R-4: Authorization Decision</p> <p>Monitor Step:</p>

CSF Function	Mapped RMF Steps
	Task M-6: Ongoing Authorization (N/A) Task M-7: System Disposal (N/A)

Table A-2, CSF Category/Subcategory Definitions, provides the definitions for CSF Categories and Subcategory Unique Identifiers. GSA is aligned with the CSF via the implementation of the NIST SP 800-53 controls which address the subcategory requirements. NIST CSF Version 1.1 provides an informative (i.e., not establishing a normative standard) listing of NIST SP 800-53 controls to the subcategories. Rows highlighted in yellow in the Table A-2 depict CSF Categories/Subcategories that NIST indicates in the CSF are associated with the CA, PL, and RA controls in [Section 8](#).

Table A-2: CSF Category/Subcategory Definitions

Category/Subcategory Unique Identifiers	Definition
Asset Management (ID.AM)	The data, personnel, devices, systems, and facilities 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-1	Physical devices and systems within the organization are inventoried
ID.AM-2	Software platforms and applications within the organization are inventoried
ID.AM-3	Organizational communication and data flows are mapped
ID.AM-4	External information systems are catalogued
ID.AM-5	Resources (e.g., hardware, devices, data, time, personnel, and software) are prioritized based on their classification, criticality, and business value
ID.AM-6	Cybersecurity roles and responsibilities for the entire workforce and third-party stakeholders (e.g., suppliers, customers, partners) are established
Business Environment (ID.BE)	The organization's mission, objectives, stakeholders, and activities are understood and prioritized; this information is used to inform cybersecurity roles, responsibilities, and risk management decisions.
ID.BE-1	The organization's role in the supply chain is identified and communicated
ID.BE-2	The organization's place in critical infrastructure and its industry sector is identified and communicated
ID.BE-3	Priorities for organizational mission, objectives, and activities are established and communicated
ID.BE-4:	Dependencies and critical functions for delivery of critical services are established
ID.BE-5	Resilience requirements to support delivery of critical services are established for all operating states (e.g., under duress/attack, during recovery, normal operations)
Governance (ID.GV)	The policies, procedures, and processes to manage and monitor the organization's regulatory, legal, risk, environmental, and operational requirements are understood and inform the management of cybersecurity risk.
ID.GV-1	Organizational cybersecurity policy is established and communicated
ID.GV-2	Cybersecurity roles and responsibilities are coordinated and aligned with internal roles and external partners
ID.GV-3	Legal and regulatory requirements regarding cybersecurity, including privacy and civil liberties obligations, are understood and managed
ID.GV-4	Governance and risk management processes address cybersecurity risks

Category/Subcategory Unique Identifiers	Definition
Risk Assessment (ID.RA)	The organization understands the cybersecurity risk to organizational operations (including mission, functions, image, or reputation), organizational assets, and individuals.
ID.RA-1	Asset vulnerabilities are identified and documented
ID.RA-2	Cyber threat intelligence is received from information sharing forums and sources
ID.RA-3	Threats, both internal and external, are identified and documented
ID.RA-4	Potential business impacts and likelihoods are identified
ID.RA-5	Threats, vulnerabilities, likelihoods, and impacts are used to determine risk
ID.RA-6	Risk responses are identified and prioritized
Risk Management Strategy (ID.RM)	The organization's priorities, constraints, risk tolerances, and assumptions are established and used to support operational risk decisions.
ID.RM-1	Risk management processes are established, managed, and agreed to by organizational stakeholders
ID.RM-2	Organizational risk tolerance is determined and clearly expressed
ID.RM-3	The organization's determination of risk tolerance is informed by its role in critical infrastructure and sector specific risk analysis
Supply Chain Risk Management (ID.SC)	The organization's priorities, constraints, risk tolerances, and assumptions are established and used to support risk decisions associated with managing supply chain risk. The organization has established and implemented the processes to identify, assess and manage supply chain risks.
ID.SC-1	Cyber supply chain risk management processes are identified, established, assessed, managed, and agreed to by organizational stakeholders
ID.SC-2	Suppliers and third party partners of information systems, components, and services are identified, prioritized, and assessed using a cyber supply chain risk assessment process
ID.SC-3	Contracts with suppliers and third-party partners are used to implement appropriate measures designed to meet the objectives of an organization's cybersecurity program and Cyber Supply Chain Risk Management Plan
ID.SC-4	Suppliers and third-party partners are routinely assessed using audits, test results, or other forms of evaluations to confirm they are meeting their contractual obligations
ID.SC-5	Response and recovery planning and testing are conducted with suppliers and third-party providers
Identity Management, Authentication and Access Control (PR.AC)	Access to physical and logical assets and associated facilities is limited to authorized users, processes, and devices, and is managed consistent with the assessed risk of unauthorized access to authorized activities and transactions.
PR.AC-1	Identities and credentials are issued, managed, verified, revoked, and audited for authorized devices, users and processes
PR.AC-2	Physical access to assets is managed and protected
PR.AC-3	Remote access is managed
PR.AC-4	Access permissions and authorizations are managed, incorporating the principles of least privilege and separation of duties
PR.AC-5	Network integrity is protected (e.g., network segregation, network segmentation)
PR.AC-6	Identities are proofed and bound to credentials and asserted in interactions

Category/Subcategory Unique Identifiers	Definition
PR.AC-7	Users, devices, and other assets are authenticated (e.g., single-factor, multi-factor) commensurate with the risk of the transaction (e.g., individuals' security and privacy risks and other organizational risks)
Awareness and Training (PR.AT)	The organization's personnel and partners are provided cybersecurity awareness education and are adequately trained to perform their information security-related duties and responsibilities consistent with related policies, procedures, and agreements.
PR.AT-1	All users are informed and trained
PR.AT-2	Privileged users understand roles and responsibilities
PR.AT-3	Third-party stakeholders (e.g., suppliers, customers, partners) understand roles and responsibilities
PR.AT-4	Senior executives understand roles and responsibilities
PR.AT-5	Physical and information security personnel understand roles and responsibilities
Data Security (PR.DS)	Information and records (data) are managed consistent with the organization's risk strategy to protect the confidentiality, integrity, and availability of information.
PR.DS-1	Data-at-rest is protected
PR.DS-2	Data-in-transit is protected
PR.DS-3	Assets are formally managed throughout removal, transfers, and disposition
PR.DS-4	Adequate capacity to ensure availability is maintained
PR.DS-5	Protections against data leaks are implemented
PR.DS-6	Integrity checking mechanisms are used to verify software, firmware, and information integrity
PR.DS-7	The development and testing environment(s) are separate from the production environment
PR.DS-8	Integrity checking mechanisms are used to verify hardware integrity
Information Protection Processes and Procedures (PR.IP)	Security policies (that address purpose, scope, roles, responsibilities, management commitment, and coordination among organizational entities), processes, and procedures are maintained and used to manage protection of information systems and assets.
PR.IP-1	A baseline configuration of information technology/industrial control systems is created and maintained incorporating security principles (e.g., concept of least functionality)
PR.IP-2	A System Development Life Cycle to manage systems is implemented
PR.IP-3	Configuration change control processes are in place
PR.IP-4	Backups of information are conducted, maintained, and tested
PR.IP-5	Policy and regulations regarding the physical operating environment for organizational assets are met
PR.IP-6	Data is destroyed according to policy
PR.IP-7	Protection processes are improved
PR.IP-8	Effectiveness of protection technologies is shared
PR.IP-9	Response plans (Incident Response and Business Continuity) and recovery plans (Incident Recovery and Disaster Recovery) are in place and managed
PR.IP-10	Response and recovery plans are tested
PR.IP-11	Cybersecurity is included in human resources practices (e.g., deprovisioning, personnel screening)
PR.IP-12	A vulnerability management plan is developed and implemented
Maintenance (PR.MA)	Maintenance and repairs of industrial control and information system components are performed consistent with policies and procedures.

Category/Subcategory Unique Identifiers	Definition
PR.MA-1	Maintenance and repair of organizational assets are performed and logged, with approved and controlled tools
PR.MA-2	Remote maintenance of organizational assets is approved, logged, and performed in a manner that prevents unauthorized access
Protective Technology (PR.PT)	Technical security solutions are managed to ensure the security and resilience of systems and assets, consistent with related policies, procedures, and agreements.
PR.PT-1	Audit/log records are determined, documented, implemented, and reviewed in accordance with policy
PR.PT-2	Removable media is protected and its use restricted according to policy
PR.PT-3	The principle of least functionality is incorporated by configuring systems to provide only essential capabilities
PR.PT-4	Communications and control networks are protected
PR.PT-5	Mechanisms (e.g., failsafe, load balancing, hot swap) are implemented to achieve resilience requirements in normal and adverse situations
Anomalies and Events (DE.AE)	Anomalous activity is detected and the potential impact of events is understood.
DE.AE-1	A baseline of network operations and expected data flows for users and systems is established and managed
DE.AE-2	Detected events are analyzed to understand attack targets and methods
DE.AE-3	Event data are collected and correlated from multiple sources and sensors
DE.AE-4	Impact of events is determined
DE.AE-5	Incident alert thresholds are established
Security Continuous Monitoring (DE.CM)	The information system and assets are monitored at discrete intervals to identify cybersecurity events and verify the effectiveness of protective measures.
DE.CM-1	The network is monitored to detect potential cybersecurity events
DE.CM-2	The physical environment is monitored to detect potential cybersecurity events
DE.CM-3	Personnel activity is monitored to detect potential cybersecurity events
DE.CM-4	Malicious code is detected
DE.CM-5	Unauthorized mobile code is detected
DE.CM-6	External service provider activity is monitored to detect potential cybersecurity events
DE.CM-7	Monitoring for unauthorized personnel, connections, devices, and software is performed
DE.CM-8	Vulnerability scans are performed
Detection Processes (DE.DP)	Detection processes and procedures are maintained and tested to ensure awareness of anomalous events.
DE.DP-1	Roles and responsibilities for detection are well defined to ensure accountability
DE.DP-2	Detection activities comply with all applicable requirements
DE.DP-3	Detection processes are tested
DE.DP-4	Event detection information is communicated
DE.DP-5	Detection processes are continuously improved
Response Planning (RS.RP)	Response processes and procedures are executed and maintained, to ensure response to detected cybersecurity events.
RS.RP-1:	Response plan is executed during or after an incident
Communications (RS.CO)	Response activities are coordinated with internal and external stakeholders (e.g., external support from law enforcement agencies).

Category/Subcategory Unique Identifiers	Definition
RS.CO-1	Personnel know their roles and order of operations when a response is needed
RS.CO-2	Incidents are reported consistent with established criteria
RS.CO-3	Information is shared consistent with response plans
RS.CO-4	Coordination with stakeholders occurs consistent with response plans
RS.CO-5	Voluntary information sharing occurs with external stakeholders to achieve broader cybersecurity situational awareness
Analysis (RS.AN)	Analysis is conducted to ensure effective response and support recovery activities.
RS.AN-1	Notifications from detection systems are investigated
RS.AN-2	The impact of the incident is understood
RS.AN-3	Forensics are performed
RS.AN-4	Incidents are categorized consistent with response plans
RS.AN-5	Processes are established to receive, analyze and respond to vulnerabilities disclosed to the organization from internal and external sources (e.g., internal testing, security bulletins, or security researchers)
Mitigation (RS.MI)	Activities are performed to prevent expansion of an event, mitigate its effects, and resolve the incident.
RS.MI-1	Incidents are contained
RS.MI-2	Incidents are mitigated
RS.MI-3	Newly identified vulnerabilities are mitigated or documented as accepted risks
Improvements (RS.IM)	Organizational response activities are improved by incorporating lessons learned from current and previous detection/response activities.
RS.IM-1	Response plans incorporate lessons learned
RS.IM-2	Response strategies are updated
Recovery Planning (RC.RP)	Recovery processes and procedures are executed and maintained to ensure restoration of systems or assets affected by cybersecurity incidents.
RC.RP-1	Recovery plan is executed during or after a cybersecurity incident
Improvements (RC.IM)	Recovery planning and processes are improved by incorporating lessons learned into future activities.
RC.IM-1	Recovery plans incorporate lessons learned
RC.IM-2	Recovery strategies are updated
Communications (RC.CO)	Restoration activities are coordinated with internal and external parties (e.g., coordinating centers, Internet Service Providers, owners of attacking systems, victims, other CSIRTs, and vendors).
RC.CO-1	Public relations are managed
RC.CO-2	Reputation after an event is repaired
RC.CO-3	Recovery activities are communicated to internal and external stakeholders as well as executive and management teams

Appendix B: Consolidated List of Guidance, Policies, Procedures, Templates

Federal Regulations/Guidance:

- [CISA Cybersecurity Directives](#)
- [EO 13800](#), “Presidential Executive Order on Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure”
- [FIPS 140-2](#), “Security Requirements for Cryptographic Modules”
- [FIPS 140-3](#), “Security Requirements for Cryptographic Modules”
- [FIPS 199](#), “Standards for Security Categorization of Federal Information and Information Systems”
- [FIPS 200](#), “Minimum Security Requirements for Federal Information and Information Systems”
- [NIST CSF](#), “Framework for Improving Critical Infrastructure Cybersecurity”
- [NIST SP 800-18, Revision 1](#), “Guide for Developing Security Plans for Federal Information Systems”
- [NIST SP 800-30 Revision 1](#), “Guide for Conducting Risk Assessments”
- [NIST SP 800-37, Revision 2](#), “Risk Management Framework for Information Systems and Organizations: A System Life Cycle Approach for Security and Privacy”
- [NIST SP 800-47, Revision 1](#), “Managing the Security of Information Exchanges”
- [NIST SP 800-53, Revision 5](#), “Security and Privacy Controls for Information Systems and Organizations”
- [NIST SP 800-53B](#), “Control Baselines for Information Systems and Organizations”
- [NIST SP 800-60, Volume I, Revision 1](#), “Volume I: Guide for Mapping Types of Information and Information Systems to Security Categories”
- [NIST SP 800-60, Volume II, Revision 1](#), “Volume II: Appendices to Guide for Mapping Types of Information and Information Systems to Security Categories”
- [NIST SP 800-171, Revision 2](#), “Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations”
- [OMB M-22-18](#), “Enhancing the Security of the Software Supply Chain through Secure Software Development Practices”
- [OMB M-23-16](#), “Update to Memorandum M-22-18, *Enhancing the Security of the Software Supply Chain through Secure Software Development Practices*”
- [Public Law 113-283](#), “Federal Information Security Modernization Act of 2014”

GSA Policies and Guidance:

- [Supplement 1 to Acquisition Letter MV-2023-02 \(MV-23-02\)](#), “Ensuring Only Approved Software is Acquired and Used at GSA”

The GSA policies listed below are available on the [GSA.gov Directives Library](#) page.

- GSA Order CIO 1878.3, “Developing and Maintaining Privacy Threshold Assessments (PTAs), PIAs, Privacy Act Notices, and System of Records Notices”
- GSA Order CIO 2100.1, “GSA Information Technology (IT) Security Policy”
- GSA Order CIO 2140.4, “Information Technology (IT) Solutions Life Cycle (SLC) Policy”
- GSA Order 2160.1, “GSA Information Technology (IT) Standards Profile”
- GSA Order CIO 2183.1, “Enterprise Identity, Credential, and Access Management (ICAM) Policy”

The GSA CIO-IT Security Procedural Guides listed below are available on the [GSA.gov IT Security Procedural Guides](#) page with the exception of CIO-IT Security-18-90 which is restricted. It is available on the internal GSA InSite [IT Security Procedural Guides](#) page.

- GSA CIO-IT Security-01-05: Configuration Management (CM)
- GSA CIO-IT Security-06-30: Managing Enterprise Cybersecurity Risk
- GSA CIO-IT Security-06-32: Media Protection (MP)
- GSA CIO-IT Security-07-35: Web Application Security
- GSA CIO-IT Security-08-39: IT Security Program Management Implementation Plan
- GSA CIO-IT Security-09-44: Plan of Action and Milestones (POA&M)
- GSA CIO-IT Security-09-48: Security and Privacy Requirements for IT Acquisition Efforts
- GSA CIO-IT Security-11-51: Conducting Penetration Test Exercises
- GSA CIO-IT Security-11-62: Salesforce Platform Security Implementation
- GSA CIO-IT Security-12-66: Information Security Continuous Monitoring (ISCM) Strategy & Ongoing Authorization (OA) Program
- GSA CIO-IT Security-14-68: Lightweight Security Authorization Process
- GSA CIO-IT Security-16-75: Low Impact Software as a Service (LiSaaS) Solutions Authorization Process
- GSA CIO-IT Security-18-88: Moderate Impact Software as a Service (MiSaaS) Security Authorization Process
- GSA CIO-IT Security-18-90: Common Control Catalog (CCC)
- GSA CIO-IT Security-18-91: Risk Management Strategy (RMS)
- GSA CIO-IT Security-19-95: Security Engineering Architecture Reviews
- GSA CIO-IT Security-19-101: External Information System Monitoring
- GSA CIO-IT Security-21-112: Protecting Controlled Unclassified Information (CUI) in Nonfederal Systems and Organizations Process

The GSA CIO-IT Security Forms (document templates) listed below are available on the [IT Security Forms and Aids](#) page.

- FIPS 199 Security Categorization Template
- Digital Identity Acceptance Statement
- GSA Control Tailoring Workbook
- FIPS 199 Low, Moderate, and High Control Implementation Summaries
- FIPS 199 Low, Moderate, and High System Security and Privacy Plan Templates
- Security Assessment Plan (SAP) Template
- GSA NIST 800-53 Rev 5 Low, Moderate, and High 5 Test Case Workbooks
- Security Assessment Report (SAR) Template
- Certification Letter Template
- ATO Letter Template
- FIPS 199 Low, Moderate, and High Information System Contingency Plan Templates
- Information System Contingency Plan Test Plan Template
- Information System Contingency Plan Test Report Template
- Information Exchange Agreement (IEA) Template
- Interconnection Security Agreement (ISA) Template
- GSA NIST SP 800-53 Rev5 LATO Test Case Workbook
- GSA NIST 800-53 MiSaaS Test Case Workbook
- MiSaaS SSPP Template
- Penetration Test Exercise Templates:
 - RoE Kickoff Presentation Template

- Assessment Penetration Test Rules of Engagement Template
- Penetration Test Report Template
- POA&M Share Drive User Access Request Form
- ISCM Ongoing Authorization Letter Template
- ISCM OA Onboarding Authorization Report (OAR) Template
- Salesforce Platform Documentation Templates
- Transfer Notification Template
- Disposal Notification Template

Privacy Threshold Analysis/Privacy Impact Assessment information is available on GSA's [IT Privacy](#) page.

Appendix C: A&A Process Package Document Lists/Links

This Appendix contains a listing of the A&A Package documentation requirements for each of the A&A processes described in this guide. Document templates are available on the [IT Security Forms and Aids](#) page. Search for the title of the template/form/document listed to obtain its current version.

Standard A&A Process
Documents
System Security and Privacy Plan (Low, Moderate, High) <ul style="list-style-type: none"> Appendix A - Acronyms, Terms, and Definitions Appendix B - References Appendix C - Hosted Subsystems (if applicable) Other Appendices, as necessary Attachment 1: Privacy Threshold Analysis/Privacy Impact Assessment Attachment 2: FIPS 199 Security Categorization Attachment 3: Digital Identity Acceptance Statement Attachment 4: Interconnection Security Agreement(s)/Information Exchange Agreements (if applicable) Attachment 5: Control Tailoring Workbook (CTW) Attachment 6: Control Implementation Summary Table (Low, Moderate, High) Attachment 7: Contingency Plan (with Business Impact Assessment) Attachment 8: Contingency Plan Test Report Attachment 9: Incident Response Plan Attachment 10: Incident Response Plan Test Report Attachment 11: Configuration Management Plan (Moderate and High only) Attachment 12: Continuous Monitoring Plan (if applicable) Attachment 13: Code Review Report (if applicable) Other Attachments, as necessary
Security Assessment Report (Results from the Security Assessment Plan) <ul style="list-style-type: none"> Appendix A - Acronyms, Terms, and Definitions Appendix B - NIST 800-53 Test Cases Appendix C - Operating System Scanning Results Appendix D - Database Application Scanning Results Appendix E - Web Application Scanning Results Other Appendices, as necessary Attachment 1: Penetration Test Report Other Attachments, as necessary
Plan of Action and Milestones (POA&M)
Certification Memorandum
ATO Letter

Lightweight Security Authorization Process
Documents
System Security and Privacy Plan (with appendices/attachments) Appendix A - References Attachment 1: Privacy Threshold Analysis/Privacy Impact Assessment Attachment 2: FIPS 199 Security Categorization Attachment 3: Digital Identity Acceptance Statement Attachment 4: Code Review Report Attachment 5: Penetration Test Results (if applicable) Attachment 6: Vulnerability Scan Results
Security Assessment Report (with appendices/attachments) Appendix A - Acronyms Attachments: Additional Supporting Documents (as necessary, see note below)
Note: Systems receiving a 1-year LATO or 3-year ATO would have a SAR with Attachments 4-6 of the SSPP typically included in the SAR instead of the SSPP.
CRM - Please contact the designated ISSM to receive the vendor's current CRM for the system.
POA&M
Certification Memorandum
ATO Letter

Security Reviews for Low Impact Software as a Service Solutions Process
Documents
LiSaaS Solution Profile
LiSaaS Solution Review Checklist
Checklist Supporting Artifacts
FIPS 199 Categorization
Latest vulnerability scan results (e.g., web, OS, container), as applicable
Attestation Letter (if applicable)
ATO Letter

GSA Agency FedRAMP Process
Documents
Note: The FedRAMP A&A documentation templates are available on the FedRAMP website under Documents and Templates. FedRAMP is transitioning to NIST SP 800-53, Revision 5, visit the FedRAMP site to get the current templates.
System Security Plan
Security Assessment Plan
NIST 800-53 Test Cases
Security Assessment Report
(Vendors) Users Guide
Control Implementation Summary
POA&M
FIPS 199 Categorization
Digital Identity Worksheet
Rules of Behavior
(Vendors) Configuration Management Plan

GSA Agency FedRAMP Process
(Vendors) Information System Security Policies
IT Contingency Plan
(Vendors) Incident Response Plan
Privacy Threshold Analysis and PIA

Moderate Impact Software as a Service (MiSaaS) Security Authorization Process
Documents
System Security and Privacy Plan MiSaaS SSPP
Security Assessment Report Security Assessment Report (including, as applicable) <ul style="list-style-type: none"> • MiSaaS Test Case Workbook • Vulnerability Scan Data • Penetration Test Report
POA&M
CRM - Please contact your ISSM to receive the vendor's current CRM for your system.
Certification Memorandum
ATO Letter

GSA Subsystem A&A Process
Documents
FIPS 199 Low Subsystem
(See Lightweight Security Authorization Process Documentation)
FIPS 199 Moderate Subsystem
System Security and Privacy Plan (Low, Moderate, High) (only hybrid and system specific controls)
NIST 800-53 Test Cases (only hybrid and system specific controls)
Security Assessment Report (only hybrid and system specific controls)
Note: No ATO Letter, the parent system's ATO Letter is updated with the subsystem listed

GSA Ongoing Authorization Program
Documents
OATO Package <ul style="list-style-type: none"> • OA Checklist (with supporting artifacts) • Onboarding Assessment Report
OATO Letter

GSA Leveraged FedRAMP SaaS Solution Process	
Documents	
FIPS 199 Low Impact SaaS	
	CRM System Security and Privacy Plan, including: <ul style="list-style-type: none"> - Attachment 1: Privacy Threshold Assessment/Privacy Impact Assessment (if applicable) - Attachment 2: FIPS 199 Security Categorization - Attachment 3: Digital Identity Acceptance Statement - Other Attachments, as necessary
	Annotated CSP CRM, with evidentiary supporting artifacts, as necessary
	Self-attestation Letter
	POA&M
	Certification Memorandum
	ATO Letter
FIPS 199 Moderate Impact SaaS	
	CRM System Security and Privacy Plan, including: <ul style="list-style-type: none"> - Attachment 1: Privacy Threshold Assessment/Privacy Impact Assessment (if applicable) - Attachment 2: FIPS 199 Security Categorization - Attachment 3: Digital Identity Acceptance Statement - Other Attachments, as necessary
	Annotated CSP CRM, with evidentiary supporting artifacts, as necessary
	Security Assessment Report
	POA&M
	Certification Memorandum
	ATO Letter

Appendix D: Scanning Frequency By A&A Process

Scanning/testing frequency by component type and A&A process are listed in the [06-30 Scanning Parameter Spreadsheet](#).

Appendix E: Showstopper Items and Associated Controls

Table E-1 lists the Showstopper items and associated NIST SP 800-53 controls that GSA has identified that, if not fully compliant, will keep a system from receiving a full ATO.

Table E-1: GSA Showstopper Items/Controls

#	Showstopper Description	Control Reference
1	<p><u>Multi-Factor Authentication (MFA) for Privileged & User-level access:</u></p> <p>All systems shall utilize a GSA-approved multi-factor authentication mechanism for both privileged and non-privileged user authentication. All new and modernizing systems must undergo an ICAM Portfolio Review in accordance with GSA Order CIO 2183.1, "Enterprise Identity, Credential, and Access Management (ICAM) Policy."</p> <p>If an assessment identifies MFA has not been implemented, per policy requirements, then the system will not be approved for a 3-year ATO or OA, until MFA is implemented.</p>	<p>IA-2 (1) Identification and Authentication (Organizational Users) Multifactor Authentication to Privileged Accounts</p> <p>IA-2 (2) Identification and Authentication (Organizational Users) Multifactor Authentication to Non-Privileged Accounts</p>
2	<p><u>Critical and High Vulnerabilities:</u></p> <p>GSA requires ongoing remediation actions including patching, updating, and upgrading out of date components, addressing known vulnerabilities, completing POA&Ms, maintaining secure configurations of components.</p> <p>If an assessment identifies ongoing remediation actions that are not being addressed within the remediation timeline as defined in CIO-IT Security-17-80: Vulnerability Management, then the system will not be approved for a 3-year ATO or OA, until the associated risks are mitigated.</p>	<p>SI-2 Flaw Remediation</p>
3	<p><u>Remote Code Execution (RCE) Vulnerabilities:</u></p> <p>RCE vulnerabilities can be exploited if user input is injected into a File or a String and executed (evaluated) by the programming language's parser. RCE vulnerabilities must be remediated, regardless of the RCE system impact level identified.</p> <p>If an information system is identified with an RCE vulnerability during an assessment, then the system will not be approved for a 3-year ATO or OA, until the risk is mitigated.</p>	<p>SI-2 Flaw Remediation</p>
4	<p><u>EOL Software:</u></p> <p>The continued usage of End of Life (EOL) Software requires a risk evaluation to be performed by the OCISO. An EOL Software usage justification to include POA&M tracking requirements or an approved</p>	<p>SA-22 Unsupported System Components</p>

#	Showstopper Description	Control Reference
	<p>Acceptance of Risk (AOR), are the possible documentation outcome requirements of the risk evaluation.</p> <p>If an assessment identifies EOL software usage has not been properly evaluated and documented, then the system will not be approved for a 3-year ATO or OA, until completed.</p>	
5	<p><u>System Architecture has been reviewed and approved by ISE:</u></p> <p>CIO-IT Security-19-95: Security Engineering Architecture Reviews identifies the OCISO Security Engineering (ISE) system evaluation requirements.</p> <p>If an assessment identifies an ISE security engineering architecture review has not been completed for the system, then the system will not be approved for a 3-year ATO or OA, until one is completed.</p>	<p>PL-8 Security and Privacy Architecture</p> <p>SA-8 Security and Privacy Engineering Principles</p>
6	<p><u>Integration with GSA's Security Stack (Federal Systems):</u></p> <p>System integration includes;</p> <ul style="list-style-type: none"> • Sending all logs listed in CIO-IT Security-01-08: Auditing and Accountability (AU) to GSA's central Enterprise Logging Platform (ELP) to support information system monitoring. • Using GSA OCISO perimeter firewall services. • Integration with GSA's internal infrastructure security tools (agent and agent-less) for: <ul style="list-style-type: none"> ○ Configuration setting monitoring (e.g., BigFix, MasS360, GoogleMDM). ○ Whitelisting/blacklisting and restricting user installation of software (e.g., CarbonBlack). ○ Scanning to identify vulnerabilities (e.g., Tenable Security Center (TSC), Invicti). ○ Antivirus and malicious code protection (e.g., FireEye HX, Endgame/Elastic Security Defend). ○ Inventory management (e.g., BigFix, Forescout/Secure Connector, MaaS360, GoogleMDM). Integration with GSA's security container-based management solutions • Cloud Service Provider Integrations (e.g., Prisma Cloud Enterprise). <p>Note: The tools referenced above relate to GSA's internal infrastructure and systems those tools can be integrated with, including tools used within GSA's cloud environments. Additional tools providing the same function may be used in Contractor systems if approved by the GSA CISO and AO.</p> <p>If an assessment identifies a system that has not been integrated with GSA Security Stack (based upon the specific system requirements), then the system will not be approved for a 3-year ATO or OA, until the deployment requirements have been completed.</p>	<p>Additional details on GSA's security stack can be found in this Google Sheet.</p> <p>GSA ISCM Enterprise Security Management Tools</p>

#	Showstopper Description	Control Reference
7	<p><u>Encryption of Sensitive Data (i.e., PII, PCI, Authenticators, other business sensitive data):</u></p> <p>Encryption of Sensitive Data at Rest</p> <p>**Systems that process Personally Identifiable Information (PII), Payment Card Industry (PCI) data, Authenticators (e.g., passwords, tokens, keys, certificates, hashes, etc.), and other sensitive data as determined by the AO, shall encrypt that data everywhere (i.e., at file level, database level, at rest, and in transit). For databases, encryption of the whole database, table, column, or field levels is acceptable, as appropriate. Other methods including, but not limited to, application encryption or tokenization are also acceptable.</p> <p>Encryption of Sensitive Data in Transit</p> <p>For web services connections, implement end to end encryption terminating the connection at the web server; connections terminated at a load balancer, Firewall, and/or WAF shall employ re-encryption techniques to ensure end to end encryption.**</p> <p>ALL associated URLs must have their second-level domain HTTP Strict Transport Security (HSTS) preloaded and have no weak ciphers, have no weak protocols, and preload .gov domains. (see BOD 18-01, Enhance Email and Web Security).</p> <p>SSL/TLS implementations shall align with CIO-IT Security-14-69: SSL/TLS Implementation.</p> <p>GSA Policy for FIPS 140-3/140-2 Encryption Modules and FIPS-approved encryption ciphers</p> <p>Federal Policy requires implementation of FIPS 140-3/140-2⁶ validated encryption modules and FIPS-approved ciphers suites.</p> <ul style="list-style-type: none"> • Encryption of GSA sensitive data (e.g., PII, PCI, Authenticators, other business sensitive data) at rest and in transit shall be with FIPS validated encryption modules wherever possible; exceptions require Acceptance of Risk (AOR) to be signed by the GSA CISO and AO. <p>If an assessment identifies the system has not addressed data encryption based upon the specific system's data protection requirements, then the system will not be approved for a 3-year ATO or OA, until the deployment requirements have been completed.</p>	<p>SC-8 Transmission Confidentiality and Integrity</p> <p>SC-8(1) Transmission Confidentiality and Integrity Cryptographic Protection</p> <p>SC-28 Protection of Information at Rest</p> <p>SC-28 (1) Protection of Information at Rest Cryptographic Protection</p>
8	<p><u>Compliance with CISA EDs/BODs:</u></p> <p>CISA develops and oversees the implementation of BODs and EDs which require action to safeguard Federal information and information systems from a known or reasonably suspected information security threat,</p>	<p>SI-2 Flaw Remediation</p>

⁶ NIST has issued FIPS 140-3 and no longer accepts FIPS 140-2 modules for validation. However, previously validated 140-2 modules will be accepted through September 22, 2026. For additional information see the NIST cryptographic module validation program [web page](#).

#	Showstopper Description	Control Reference
	<p>vulnerability, or risk; and protecting the information system from, or mitigating, an information security threat.</p> <p>BODs and EDs are compulsory. Federal agencies are required to comply per <u>44 U.S.C. § 3552 (b)(1)(A)(B)(C)</u> and <u>44 U.S.C. § 3554 (a)(1)(B)(v)</u>.</p> <p>If an assessment identifies a system has not complied with CISA BODs/EDs, including the <u>CISA KEV Catalog</u> vulnerabilities per <u>BOD 22-01</u>, and does not have approved AORs for any shortfalls, then the system will not be approved for an ATO.</p>	