NIST Special Publication 800-37
Risk Management Framework (RMF) Overview

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

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Risk Management Framework (RMF) for Information Systems & Organizations

HOLLISTIC & FLEXIBLE
7 STEP PROCESS
TO MANAGE RISK

ADDRESSES
CYBERSECURITY & PRIVACY
RISK

APPLICABLE TO
ALL TYPES
OF SYSTEMS & ORGANIZATIONS

3 REVISIONS SINCE
2004

DEVELOPED BY THE
JOINT TASK FORCE

MANDATED BY
OMB A-130
FOR FEDERAL AGENCIES

SYSTEM & COMMON CONTROL
AUTHORIZATIONS

PROVIDES LINKS TO OTHER KEY
NIST PUBS

ROBUST FEDERAL IMPLEMENTATION OF THE
CYBERSECURITY FRAMEWORK

Risk Management Framework Overview

The RMF provides a ***structured, yet flexible process*** for managing ***cybersecurity and privacy risk*** that includes system categorization, control selection, implementation, assessment, authorization, and continuous monitoring.

Risk Management Framework Steps

Essential activities to **prepare** the organization to manage security and privacy risks

Categorize the system and information processed, stored, and transmitted based on an impact analysis

Select the set of NIST SP 800-53 controls to protect the system based on risk assessment(s)

Implement the controls and document how controls are deployed

Assess to determine if the controls are in place, operating as intended, and producing the desired results

Senior official makes a risk-based decision to **authorize** the system (to operate)

Continuously **monitor** control implementation and risks to the system

RMF Prepare Step

Purpose: carry out essential activities at all three risk management levels to help prepare the organization to manage its security and privacy risks using the RMF.

Organization-& Mission/Business Process Level Tasks

P-1: Risk Management Roles

P-2: Risk Management Strategy

P-3: Risk Assessment – Organization

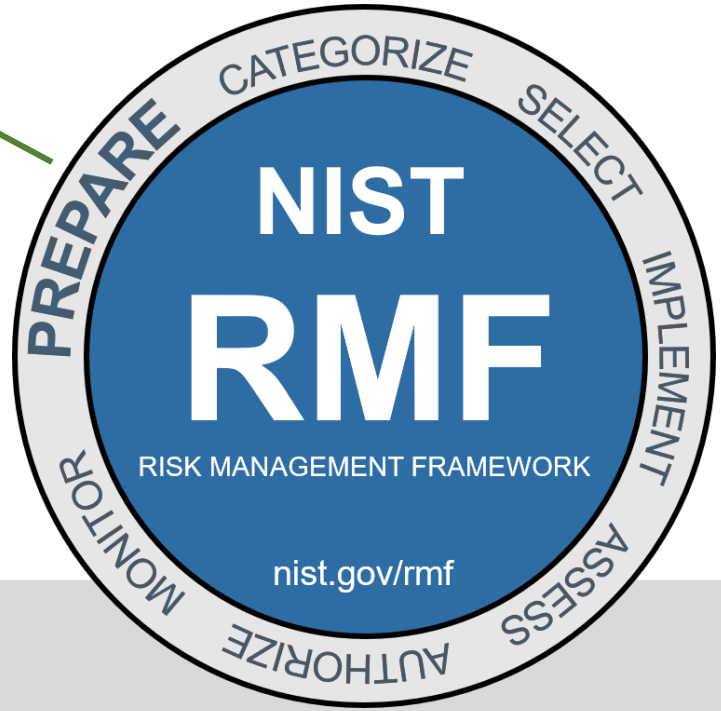
P-4: Organizationally-tailored Control Baselines and Cybersecurity Framework Profiles *(optional)*

P-5: Common Control Identification

P-6: Impact Level Prioritization *(optional)*

P-7: Continuous Monitoring Strategy – Organization

P-8: Mission or Business Focus



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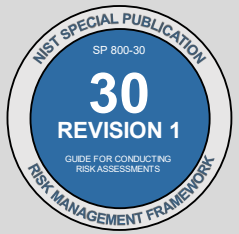


RMF Prepare Step

System Level Tasks

P-9: System Stakeholders

P-10: Asset Identification

P-11: Authorization Boundary

P-12: Information Types

P-13: Information Life Cycle

P-14: Risk Assessment - System

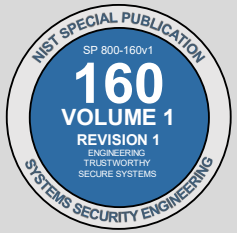
P-15: Requirements Definition

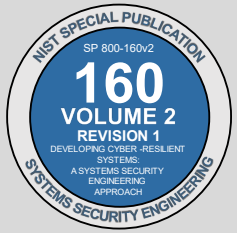
P-16: Enterprise Architecture

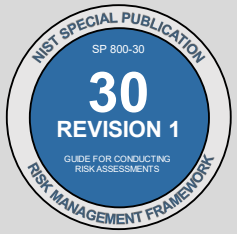
P-17: Requirements Allocation

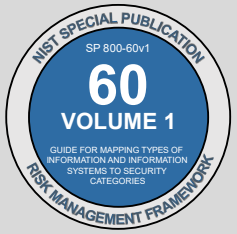
P-18: System Registration

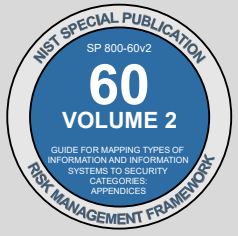
Related:











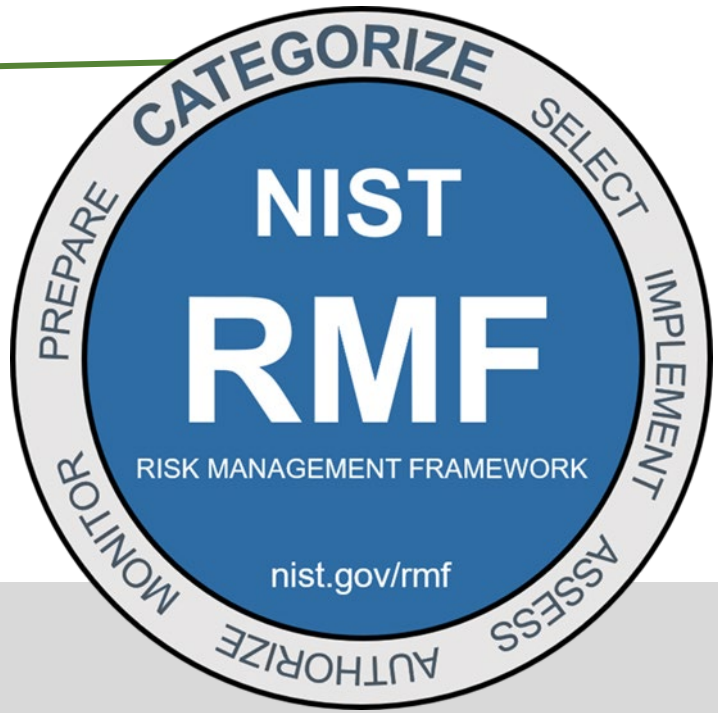
RMF Categorize Step

Purpose: inform organizational risk management processes and tasks by determining the adverse impact of the loss of confidentiality, integrity, and availability of organizational systems and information to the organization.

C-1: System Description

C-2: Security Categorization

C-3: Security Categorization Review and Approval



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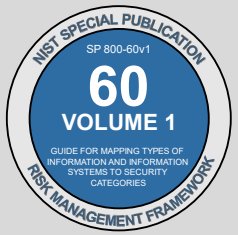
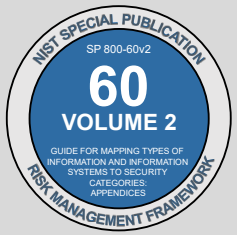




RMF Select Step

Purpose: select, tailor, and document the controls necessary to protect the information system and organization commensurate with risk to organizational operations and assets, individuals, and the Nation.

S-1: Control Selection

S-2: Control Tailoring

S-3: Control Allocation

S-4: Documentation of Planned Control Implementations

S-5: Continuous Monitoring Strategy – System

S-6: Plan Review and Approval

Related:

RMF Implement Step

Purpose: implement the controls as specified in security and privacy plans for the system and for the organization, and update the plans with the as-implemented details.

I-1: Control Implementation
I-2: Update Control Implementation Information

Related:

RMF Assess Step

Purpose: 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 organization.

A-1: Assessor Selection

A-2: Assessment Plan

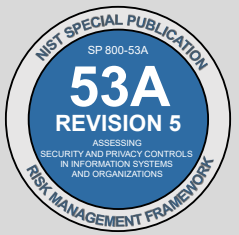
A-3: Control Assessments

A-4: Assessment Report

A-5: Remediation Actions

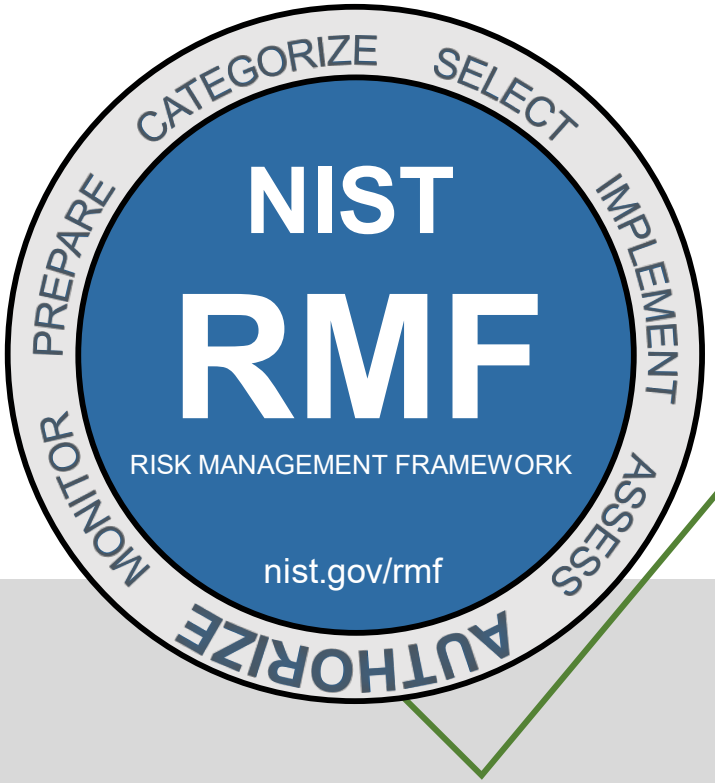
A-6: Plan of Action and Milestones

Related:



RMF Authorize Step

Purpose: provide accountability by requiring a senior management official to determine if the security and privacy 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.



R-1: Authorization Package

R-2: Risk Analysis and Determination

R-3: Risk Response

R-4: Authorization Decision

R-5: Authorization Reporting

Related:

RMF Monitor Step

Purpose: maintain an ongoing situational awareness about the security and privacy posture of the system and the organization in support of risk management decisions.

M-1: System and Environment Changes

M-2: Ongoing Assessments

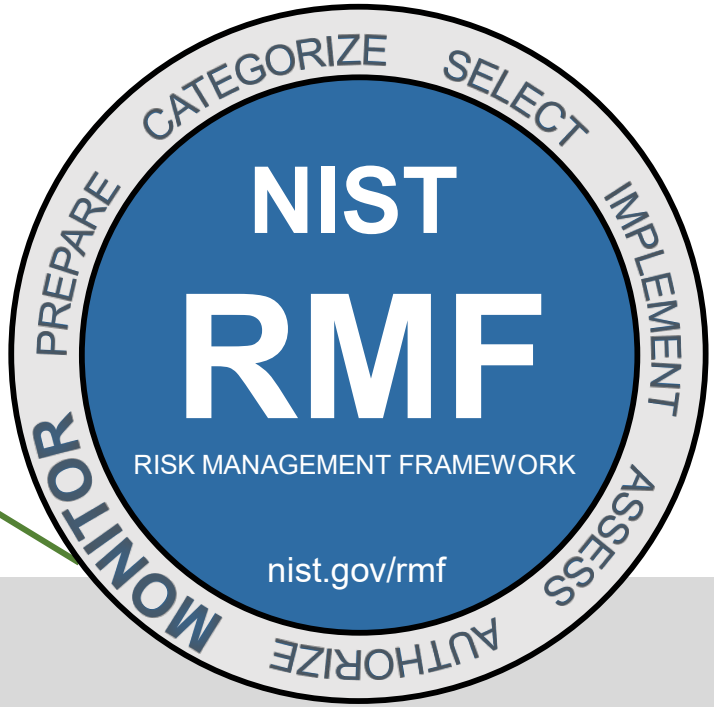
M-3: Ongoing Risk Response

M-4: Authorization Package Updates

M-5: Security and Privacy Reporting

M-6: Ongoing Authorization

M-7: System Disposal



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