

Template

StateRAMP Information System Continuous MOnitoring (ISCM) Plan

Service Provider Name

Information System Name

Version:

X.X

Date:

YYYYMMDD

Executive Summary

The Continuous Monitoring Plan is designed to ensure that {Organization Name} effectively maintains the {Information System Name} information system security and compliance posture, and also implements the processes defined by the StateRAMP Continuous Monitoring Strategy Guide. In addition to annual assessment of security controls by a third-party, {Organization Name} will ensure continuous management of system security documentation, POA&Ms, vulnerabilities, and change control requests. In addition, the security state of the system must be reported to the StateRAMP PMOinternal authorizing official, and the authorizing official of any sponsoring agencies {Organization Name} must implement a process to plan, schedule, and conduct annual penetration testing by an independent assessor to ensure compliance to the vulnerability management program. Annual updates and reviews are critical in maintaining the relevance and effectiveness of this plan.

Prepared by

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How to contact us

For questions about StateRAMP, or for technical questions about this document including how to use it, contact *pmo@StateRAMP.org*. For more information about the StateRAMP project, see [www.StateRAMP.org](https://www.stateramp.org/).

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# Introduction

## scope

This Information System Continuous Monitoring (ISCM) Plan applies to all employees, to include contract personnel. As directed, key personnel will be appointed to perform duties in support of the ISCM. All devices and data within the boundary, as documented in the system authorization, fall under the requirements of this plan. Violation of this policy could result in loss or limitations on use of information resources, as well as disciplinary and/or legal action, up to and including termination of employment.

## Roles & ReSponsibilities

The following individual(s) or group(s) are responsible for developing, implementing, coordinating, complying with, and maintaining the Continuous Monitoring Plan and its associated mechanisms:

| Role | Continuous Monitoring Responsibility |
| --- | --- |
|   | Oversight and management of the continuous monitoring process. |
|   | Development of continuous monitoring artifacts and reporting. |

## Changes and Revisions

The ISCM Plan is to be reviewed and updated by {Organization Name} Information Security Manager at least annually. Changes or revisions to this policy must be communicated to all {Organization Name} personnel with access to the {Information System Name information system as changes or revisions are made. Employees within {Organization Name} must acknowledge and comply with changes to the policy.

# Continuous Monitoring Requirements

The {Organization Name} ISCM Plan ensures that every control is monitored for effectiveness, and every control is subject to use in monitoring security status. Data sources include people, processes, technologies, the computing environment, as well as any existing relevant security control assessment reports. The following continuous monitoring requirements, mechanisms, and provisions are to be applied for all employees, management, contractors, and other users who operate within the information system boundary.

# Security Assessments & Authorizations

## Assessments

{Organization Name} must engage a third-party assessment organization (3PAO) to develop and implement a Security Assessment Plan that includes the scope of the entire information system. To comply with the requirements of StateRAMP, an assessment will be performed at least annually by a 3PAO to ensure security controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting established security requirements.

Results of all security assessments will be documented by the 3PAO in a Security Assessment Report (SAR) and presented to {Organization Name} **{Insert Roles}**, applicable security personnel, StateRAMP PMO, and sponsoring Agency Authorizing Official (AO). {Organization Name} must employ an independent penetration agent or penetration team to perform penetration testing on the information system and accept the results of the assessment in the StateRAMP Secure Repository when it meets the conditions of an ATO.

## Authorizations

{Organization Name} must ensure that the information system is approved to operate under the implementation of the agreed-upon set of security controls by requiring that the authorizing official provide a formal declaration by officially authorizing the information system before commencing operations. An authorizing official will be assigned once {Organization Name} receives an ATO.

{Organization Name} will update the security authorization at least every three years or when a significant change occurs that affects the system or operating environment.

## System Interconnections

{Organization Name} must authorize all direct connections with other information systems using Interconnection Security Agreements (ISAs) that document the security requirements and nature of information communicated between the two systems. All agreements must be reviewed every three years unless there is a significant change in the interaction between the systems in which it would be updated at that time.

In addition to the ISAs, {Organization Name} must receive any security-related audit reports available from the interconnected to system to include, if applicable, SOC1, SOC2, ATO Package or other reports of attestation.

{Organization Name} must prohibit the direct connection of any system to an external network without the use of a cryptographic information protections.

# Documentation

## System Security Plan, Security Policies, and Supporting Plans

 has developed a System Security Plan (SSP) for the information system in {Cloud Provider} that provides an overview of the system and its function, describes the security controls that are in place, planned, or partially implemented, and provides details of the how the controls are implemented. The security controls selection and implementation is consistent with the requirements of NIST SP 800-53 Revision 4. The SSP must be consistent with the security architecture, explicitly define the authorization boundary for the system, describe the operational context of the information system, provide an overview of the security requirements of the system, and describe in detail how each applicable security control is implemented.

 implements security policies that provide comprehensive management and policy coverage for all applicable StateRAMP security controls. In addition, implements formal plans that address StateRAMP security control procedures for certain high-risk processes, including Configuration Management, IT Contingency Planning, and Incident Response.

The SSP, security policies, and security plans must be protected from unauthorized modifications and in accordance with internal policies that define sensitive information storage.

## Rules of Behavior and **Access** Agreements

 must establish and document guidance that governs the acceptable use of information and information systems. These documented rules and behavior requirements must be readily available to all information system users. Before authorizing any access to information and the information system, must receive a signed acknowledgement from all users.

In the rules of behavior, must include explicit restrictions on the use of social media/networking sites and posting organizational information on public websites.

# Continuous Monitoring Procedure

## Annual Security Reassessment

In addition to all applicable security controls in the StateRAMP baseline being assessed prior to authorization, an independent security assessment must be performed annually to include:

* All critical security controls as identified in the Continuous Monitoring Strategy Guide
* One third of the remaining security controls
* All security controls related to any remediated POA&M items in the previous 12 months
* All other assessments required per the Continuous Monitoring Strategy Guide to include an external Penetration Test

## Security Documentation Reviews and Updates

The SSP must be reviewed and updated annually, or when there are significant changes to the information system or if the control implementation details have changed due to results of an internal or external security assessment.

In addition, conducts annual updates and reviews of all policies and plans to maintain relevance and efficiency.

 must review and update the rules of behavior annually or when there are significant changes. must require individuals who have signed a previous version of the rules of behavior to read and resign when the rules of behavior are revised /updated.

## Procedural Testing

 operationally tests the procedures contained in the Incident Response Plan (IRP) and the Information System Contingency Plan (ISCP) to ensure the plans will function appropriately in the event of a real-life scenario. must test and exercise the ISCP using functional exercises on an annual basis. In addition, a new ISCP Test Report must be inserted into the proper Appendix of the ISCP.

 must conduct annual security incident response testing. Upon the completion of the System Security Plan update, must record the results of the incident response testing directly in the SSP control description box indicating when testing took place, testing materials, who participated, and who conducted the testing.

## Vulnerability Scanning, Flaw Remediation, and System Integrity Monitoring

 must scan all operating systems, web applications, and databases with admin credentials within the system environment on a monthly basis. Before each scan, must update the list of vulnerabilities scanned on a continuous basis. will mitigate all discovered high-risk vulnerabilities within 30 days, all moderate-risk vulnerabilities within 90 days, and all low-risk vulnerabilities within 180 days. Due to the sensitivity of the mitigation evidence, these vulnerability scan artifacts and reports are retained by and are uploaded to the PMO repository.

Upon the release of updates, must install security-relevant software and firmware updates within 30 days. must also perform integrity scans on a monthly basis to ensure that all patching and flaw remediation updates are conducted in an authorized manner.

Vulnerabilities that are identified with vulnerability scanning and cannot be immediately remediated are categorized and documented on the POA&M, in accordance with Section 2.7 below.

## Plan of Action and Milestones (POA&M) Management and Submission

The Plan of Action and Milestones (POA&M) document serves as a high-level work plan to correct audit findings in ’s security implementation. The POA&M identifies and lists audit findings discovered through independent annual 3PAO security assessments and the monthly vulnerability scans described above. stores the latest POA&M internally, accessible only to personnel.

StateRAMP requires to formally update and communicate POA&M status on a monthly basis. An updated POA&M will be submitted monthly to the sponsoring agency. In addition to the updated POA&M submission, will also send the sponsoring agency updated vulnerability scan artifacts and reports to show evidence that outstanding high-risk and applicable moderate-risk vulnerabilities have been mitigated. The sponsoring agency reviews POA&M status for unacceptable risk exposure. Inappropriately managed POA&M items or elevated risk posture presented by new vulnerabilities are communicated to the sponsoring agency CIO as necessary.

# Compliance

All employees are required to comply with the continuous monitoring requirements above. In addition to individual disciplinary actions, failure to comply could results in the revocation of ’s authority to operate.

# StateRAMP Supporting Documentation Management

The following documentation tasks must be performed on a regular basis in order to maintain StateRAMP compliance.

| Task | Task Description |
| --- | --- |
| 1.1 | Prior to any annual StateRAMP assessment processes, initiate a review of the StateRAMP control narratives present in the SSP, information system policies, and StateRAMP supporting documents and identify if there is any control narrative change in the {Information System Name environment.If there is a change, identify scope of the change, whether the change can be updated in the control narrative or needs additional discussion with the control owners. |
| 1.2 | For those controls within the StateRAMP baseline where the control narrative has not changed, update review status to indicate the control narrative has been reviewed for accuracy and completeness and there are no changes required prior to annual assessment |
| 1.3 | For those controls within the StateRAMP baseline where the control narrative has changed, update the control narrative in the SSP, information system policies and StateRAMP supporting documentation for all the controls affected by the control change in the {Information System Name} environment. For all control implementation changes that require information gathering sessions prior to documentation, control owners will conduct meetings to analyze the scope and impact of change to the StateRAMP status. Control owners will gather information from the meetings to update the control narrative for those changes to the StateRAMP status. |
| 1.4 | For those controls within the StateRAMP baseline where the control narrative has changed, update review status to indicate the control narrative has been reviewed for accuracy and completeness and that all required changes have been completed prior to annual assessment. |
| 1.5 | Review and update the current security policies for the {Information System Name system for federal customers every 3 years or when required due to changes in the environment. |
| 1.6 | Review and update the current procedures related to the security of the {Information System Name system for federal customers annually or when required due to changes in the environment. |
| 1.7 | Review and update Interconnection Security Agreements (ISAs) between the {Information System Name system and any connected third-party systems every 3 years or when there is a significant change in the interaction between the systems. |
| 1.8 | Review and update the current Incident Response Plan (IRP) for the {Information System Name system for federal customers annually or when required due to changes in the environment. |
| 1.9 | Review and update the current Information System Contingency Plan (ISCP) for the {Information System Name system for federal customers annually or when required due to changes in the environment. |
| 1.10 | Review and update the current Configuration Management Plan (CMP) for the {Information System Name system for federal customers annually or when required due to changes in the environment. |

Table 1. StateRAMP Supporting Documentation Management – Annually

## Vulnerability Scanning

The following vulnerability scanning tasks must be performed on a regular basis in order to maintain StateRAMP compliance.

| Task  | Task Description | Responsible Roles |
| --- | --- | --- |
| 2.1 | Generate list of current information system components (servers, web applications, and databases) from the hardware and software inventory on a monthly basis and upload to the PMO repository. |   |
| 2.2 | Execute monthly vulnerability and patch management scan reports for in-scope information system components |   |
| 2.3 | Review vulnerability scan results in order to determine next steps for all vulnerabilities, including actionable vulnerabilities, zero-day vulnerabilities, and excluded vulnerabilities. All vulnerabilities will be tracked and documented using the procedures described in Table 3 “Vulnerability Tracking and Remediation” below.  |   |
| 2.4 | Upload original monthly vulnerability scan results to the PMO document repository, corresponding to the monthly continuous monitoring status report. |   |

Table 2. Vulnerability Scanning and Analysis – Monthly

| Task  | Task Description | Responsible Roles |
| --- | --- | --- |
| 3.1 | Import actionable vulnerabilities and zero-day vulnerabilities into tickets and the POA&M document (refer to Table 4, Documenting New POA&M Items, for more information) |   |
| 3.2 | Import excluded vulnerabilities into the corresponding worksheet within the POA&M document (refer to Table 4, Documenting New POA&M Items, for more information) and ensure there is a business or risk acceptance rationale completed for each exclusion. |   |
| 3.3 | Remediate identified zero-day vulnerabilities immediately (for StateRAMP as soon as feasible).  |   |
| 3.4 | Monitor status of identified actionable vulnerabilities in accordance with StateRAMP timelines for high risk (30 days) and moderate risk (90 days) vulnerabilities, using tickets and the POA&M document. |   |
| 3.5 | Remediate identified actionable vulnerabilities for StateRAMP in accordance with StateRAMP timelines for high risk (30 days) and moderate risk (90 days) vulnerabilities. |   |
| 3.6 | For closed actionable and zero-day vulnerabilities, pull targeted vulnerability scan results from the vulnerability scanning tool to demonstrate corresponding patch or vulnerability fix has been applied and vulnerability no longer shows on scan report and is not present within the information system. |   |
| 3.7 | Upload monthly vulnerability scan results to the PMO document repository, corresponding to the monthly continuous monitoring status report. |   |
| 3.8 | For closed actionable and zero-day vulnerabilities that no longer show on vulnerability scan reports, close associated ticket and POA&M item once remediation is complete.  |   |

Table 3. Vulnerability Tracking and Remediation – Monthly

## StateRAMP Continuous Monitoring and POA&M Document Management

The following POA&M management tasks must be performed on a regular basis in order to maintain StateRAMP compliance.

| Task  | Task Description | Responsible Roles |
| --- | --- | --- |
| 4.1 | On an annual basis, for each risk finding of the 3PAO’s annual security assessment, create a new actionable POA&M item within the POA&M and input following data: POA&M item (risk finding) description, ’s point of contact, POA&M item status, POA&M item original risk rating, POA&M item adjusted risk rating and rationale for adjusted risk rating. Create a corresponding ticket to assist with POA&M item tracking. |   |
| 4.2 | In accordance with Table 3, Vulnerability Tracking and Remediation, import actionable vulnerabilities and zero-day vulnerabilities available for StateRAMP tracking into tickets and the POA&M. Within the POA&M, create a new actionable POA&M item within the POA&M and input the following data: POA&M item (risk finding) description, ’s point of contact, POA&M item status, POA&M item original risk rating, POA&M item adjusted risk rating and rationale for adjusted risk rating |   |
| 4.3 | In accordance with Table 3, Vulnerability Tracking and Remediation, import excluded vulnerabilities and accompanying business or risk acceptance rationale into the corresponding worksheet within the POA&M document. Input the following data: POA&M item (risk finding) description, ’s point of contact, POA&M item status of exclusion, and the business or risk acceptance rationale for POA&M item exclusion |   |
| 4.4 | Review all actionable POA&M items, including all 3PAO risk findings and all actionable and zero-day vulnerabilities to determine potential {} response: Remediation of POA&M item within corresponding StateRAMP timelines – as soon as possible for zero-day actionable POA&M items 30 days for high-risk actionable POA&M items, 90 days for moderate-risk actionable POA&M items (no deviation), Extension of corresponding remediation timeline for POA&M item (deviation), or risk acceptance of POA&M item (deviation). |   |
| 4.5 | For actionable POA&M items where {Organization Name} expects to deviate from StateRAMP timelines or risk acceptance guidelines, will document the following in a way that can be easily reported in accordance with StateRAMP POA&M item deviation requirements: POA&M item remediation milestone changes, Business / operational requirements for POA&M item milestone changes, Extensions for POA&M item milestone completion dates, POA&M item risk reduction rationale, POA&M item risk acceptance rationale. |   |
| 4.6 | Following review and documentation of any deviations, update all actionable POA&M items with any changes to: POA&M item scheduled completion date, POA&M item remediation milestones, POA&M item risk ratings, and any POA&M item risk adjustment rationale |   |

Table 4. Documenting New POA&M Items – Monthly

| Task  | Task Description | Responsible Roles |
| --- | --- | --- |
| 5.1 | Monitor status of remediation milestones, completion, issues, and risks for all actionable POA&M items (new and previously identified) using the corresponding ticket and the POA&M document. |   |
| 5.2 | For all previously identified actionable POA&M items that were identified in prior assessments and exist in the POA&M prior to monthly new POA&M item intake (through other compliance or risk assessment sources, past vulnerability scans, or as internally reported), review for completeness and update if necessary.  |   |
| 5.3 | Identify all actionable POA&M items (new and previously identified) that will be remediated during the monthly timeframe, in accordance with StateRAMP remediation timelines: as soon as possible for zero-day actionable POA&M items 30 days for high-risk actionable POA&M items, 90 days for moderate-risk actionable POA&M items. Vulnerability scan related actionable POA&M items are handled in accordance with Table 3, Vulnerability Tracking and Remediation. |   |
| 5.4 | Remediate actionable POA&M items that have been identified during vulnerability scans in accordance with established remediation procedures for that particular class of vulnerability.  |   |
| 5.5 | For closed actionable POA&M items, pull targeted evidence artifacts and reports to demonstrate POA&M item remediation has been completed and the POA&M item is not present within the information system. |   |
| 5.6 | For closed actionable POA&M items, close corresponding ticket and POA&M item once remediation is complete. |   |

Table 5. POA&M Item Tracking and Remediation – Monthly

| Task  | Task Description | Responsible Roles |
| --- | --- | --- |
| 6.1 | In order to meet StateRAMP continuous monitoring requirements, compile the following documents from document repository a week prior to the established monthly continuous monitoring reporting date:* Original vulnerability scan results from the vulnerability scanning tool for the corresponding reporting cycle
* Targeted vulnerability scan results as evidence that closed vulnerabilities have been patched prior to the reporting date
* POA&M document containing all open actionable POA&M items
* Within the POA&M document, the POA&M worksheet of excluded vulnerabilities with corresponding business or risk acceptance rationale
 |  |
| 6.2 | Develop high-level vulnerability status report using the Continuous Monitoring Monthly Executive Summary template provided on the StateRAMP website, per the Continuous Monitoring Strategy Guide. Provide an overview of the following:* Risk adjustments or false positives for any scan findings
* Status of Annual Assessment
* Details of POA&M issues if present
* Late High Items (note pending deviations)
* Late Moderate Items (note pending deviations)
* Evidence of remediation of any POA&M findings
 |  |
| 6.3 | Review original vulnerability scan results, targeted vulnerability scan results, high-level vulnerability status report, high-level POA&M status report, and the POA&M document for quality assurance; obfuscate sensitive data (IP address ranges, hostnames, etc.) within reports prior to submission. |  |
| 6.4 | Upload original vulnerability scan reports, targeted vulnerability scan results, high-level vulnerability status report, inventory, Continuous Monitoring Monthly Executive Summary, and updated POA&M to the PMO repository. |   |

Table 6. StateRAMP Monthly Reporting – Monthly