COALFIRE

WHITE PAPER

Migration from MARS-E to ARC-AMPE Maintenance (MA) controls

CMS requirements for Administering Entities

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Purpose

This white paper provides a guide for Administering Entities (AEs) to upgrade their System Security and Privacy Plans (SSPPs) from the Minimum Acceptable Risk Standards for Exchanges (MARS-E) to the Acceptable Risk Controls for ACA, Medicaid, and Provider Entities (ARC-AMPE).

Due to the substantial number of controls, and to facilitate ease of use, this white paper is one of a series of 20 which divides the ARC-AMPE by control family. This white paper addresses the Maintenance controls.

ARC-AMPE Control Families	
Control Family	**Number of Controls**
Access Control	51
Awareness and Training	9
Audit and Accountability	19
Assessment, Authorization, and Monitoring	12
Configuration Management	31
Contingency Planning	23
Identification and Authentication	24
Incident Response	16
Maintenance (This Document)	16
Media Protection	9
Physical and Environmental Protection	19
Planning	6
Program Management	28
Personnel Security	9
Personally Identifiable Information Processing and Transparency	10
Risk Assessment	12
System and Services Acquisition	34
System and Communications Protection	34
System and Information Integrity	34
Supply Chain Risk Management	6

Background

Affordable Care Act

The Affordable Care Act (ACA) revolutionized access to healthcare in the United States by establishing Health Insurance Marketplaces (HIMs). Enhanced Direct Enrollment (EDE) is an ACA innovation that allows third-party entities, such as insurers and web-brokers, to offer consumers a seamless application and enrollment experience directly through their platforms. This approach improves accessibility to the marketplace while maintaining compliance with federal regulations.

CMS oversight

The Centers for Medicare & Medicaid Services (CMS) exercises oversight of AEs, which are responsible for overseeing and managing marketplace operations to ensure compliance with federal regulations, safeguard consumer data, and maintain the integrity of the HIM. Key aspects of CMS's oversight include:

- Requiring AEs to undergo rigorous audit processes, including demonstrating compliance with security and privacy control requirements.
- Enforcing strict data protection measures in the AE environment to ensure the confidentiality, integrity, and availability of consumer data and requiring entities to implement cybersecurity controls, conduct regular risk assessments, and submit independent security audits.
- Requiring AEs to adhere to operational policies and procedures, such as providing accurate plan information, maintaining transparent consumer interactions, and facilitating HIM enrollment without bias.
- Requiring AEs to report any data breaches or system incidents promptly and to take corrective actions as directed by CMS and the U.S. Department of Health and Human Services (HHS) Office for Civil Rights (OCR).
- Requiring AEs to renew their Authority to Connect (ATC) or Authority to Operate (ATO) annually, providing updated documentation and evidence of continued compliance with all requirements.

Through these oversight mechanisms, CMS ensures that AEs in the healthcare.gov environment deliver secure, compliant, and user-friendly services, aligning with the ACA's mission to expand access to quality health coverage.

ARC-AMPE

CMS published the ARC-AMPE Version 1.02 on April 9, 2025. This framework is slated to replace the Minimum Acceptable Risk Standards for Exchange (MARS-E) security and privacy guidelines:

- ARC-AMPE Volume 1 contains high-level guidance, and Volume 2 has the minimum-level security and privacy controls.
- ARC-AMPE Volume 2 is the new format for the SSPP for ACA AEs.
- AEs must have ARC-AMPE implemented by March 4, 2026.
- The implementation date for EDE entities has yet to be announced as of the date of this white paper.

The minimum control baseline for ARC-AMPE compliance consists of 402 controls which have been derived from the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 Revision 5, "Security and Privacy Controls for Information Systems and Organizations."

The number of controls required represents a significant increase from the MARS-E baseline, and AEs should be prepared for an increased level of effort for developing the SSPP and to submit more artifacts during audits.

Another major change is the format of the SSPP template. MARS-E uses a Microsoft Word format whereas ARC-AMPE is an Excel spreadsheet.

Control mapping

The mapping of the controls found in MARS-E Version 2.2 (based on NIST SP 800-53 Revision 4) to their new locations in ARC-AMPE (based on NIST SP 800-53 Revision 5) are included in the table below. The table lists the MARS-E control directly compared with the ARC-AMPE equivalent control name, as applicable. The table also documents any new ARC-AMPE controls that do not have MARS-E equivalents, as well as those controls that have been combined or withdrawn for ARC-AMPE.

Note also that all references to NIST SP 800-53 Revision 5 included below are based on version 5.1.1, which was issued on November 7, 2023.

Maintenance (MA)

The set of controls in this family focus on how the Exchange shall: (1) perform periodic and timely maintenance on organizational information systems; and (2) provide effective controls on the tools, techniques, mechanisms, and personnel used to conduct information system maintenance.

MARS-E		ARC-AMPE	
Control	**System Maintenance Policy and Procedures**	**Control**	**Policy and Procedures**
MA-1: System Maintenance Policy and Procedures The organization: **a.** Develops, documents, and disseminates to applicable personnel: **1.** A system maintenance policy that addresses purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance; and **2.** Procedures to facilitate the implementation of the system maintenance policy and associated system maintenance controls. **b.** Reviews and updates (as necessary) the current: **1.** System maintenance policy within every three hundred sixty-five (365) days; and **2.** System maintenance procedures within every three hundred sixty-five (365) days. **c.** System maintenance policy and procedures must ensure that contractors having access to records (i.e., files or data) maintained in a system of records are contractually bound to be covered by the Privacy Act.		**MA-01: Policy and Procedures** **a.** Develop, document, and disseminate to applicable personnel or roles: **1.** Organization-level maintenance 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 maintenance policy and the associated maintenance controls; **b.** Designate an organization-defined official to manage the development, documentation, and dissemination of the maintenance policy and procedures; and **c.** Review and update the current maintenance: **1.** Policy at least every one (1) year and following organization-defined events; and **2.** Procedures at least every one (1) year and following organization-defined events.	
Control	**Controlled Maintenance**	**Control**	**Controlled Maintenance**
MA-2: Controlled Maintenance The organization: **a.** Schedules, performs, documents, and reviews records of maintenance and repairs on information system		**MA-02: Controlled Maintenance** **a.** Schedule, document, and review records of maintenance, repair, and replacement on system components in	

MARS-E	ARC-AMPE
components in accordance with manufacturer or vendor specifications and/or organizational requirements; **b.** Approves and monitors all maintenance activities, whether performed on site or remotely and whether the equipment is serviced on site or removed to another location; **c.** Requires that the applicable business owner (or an official designated in the applicable security plan) explicitly approve the removal of the information system or system components from organizational facilities for off-site maintenance or repairs; **d.** Sanitizes equipment to remove all information from associated media prior to removal from organizational facilities for off-site maintenance or repairs; **e.** Checks all potentially impacted security controls to verify that the controls are still functioning properly following maintenance or repair actions; and **f.** Includes organization-defined maintenance-related information (defined in the applicable security plan) in organizational maintenance records. **Implementation Standards** In facilities where Personally Identifiable Information (PII) is stored or accessed, document all repairs and modifications to the physical components of a facility that are related to security (for example, hardware, walls, doors, and locks).	accordance with manufacturer or vendor specifications and/or organizational requirements; **b.** Approve and monitor all maintenance activities, whether performed on site or remotely and whether the system or system components are serviced on site or removed to another location; **c.** Require that organization-defined personnel or roles explicitly approve the removal of the system or system components from organizational facilities for off-site maintenance, repair, or replacement; **d.** Sanitize equipment to remove the following information from associated media prior to removal from organizational facilities for off-site maintenance, repair, or replacement: all organizational information; **e.** Check all potentially impacted controls to verify that the controls are still functioning properly following maintenance, repair, or replacement actions; and **f.** Include the following information in organizational maintenance records: maintenance-related information.
Control **Maintenance Tools**	**Control** **Maintenance Tools**
MA-3: Maintenance Tools The organization approves, controls, and monitors information system maintenance tools.	**MA-03: Maintenance Tools** **a.** Approve, control, and monitor the use of system maintenance tools; and **b.** Review previously approved system maintenance tools at least every one (1) year.
Control **Inspect Tools**	**Control** **Inspect Tools**
MA-3 (1): Inspect Tools The organization inspects the maintenance tools carried into a facility by maintenance personnel for any improper or unauthorized modifications.	**MA-03(01): Inspect Tools** Inspect the maintenance tools used by maintenance personnel for improper or unauthorized modifications.
Control **Inspect Media**	**Control** **Inspect Media**
MA-3 (2): Inspect Media The organization checks media containing diagnostic and test programs for malicious code before the media are used in the information system.	**MA-03(02): Inspect Media** Check media containing diagnostic and test programs for malicious code before the media are used in the system.
Control **Prevent Unauthorized Removal**	**Control** **Prevent Unauthorized Removal**
MA-3 (3): Prevent Unauthorized Removal The organization prevents the unauthorized removal of maintenance equipment containing organizational information by: **a.** Verifying that there is no sensitive information contained on the equipment; **b.** Sanitizing or destroying the equipment;	**MA-03(03): Prevent Unauthorized Removal** Prevent the removal of maintenance equipment containing organizational information by: **a.** Verifying that there is no organizational information contained on the equipment; **b.** Sanitizing or destroying the equipment; **c.** Retaining the equipment within the facility; or

MARS-E		ARC-AMPE	
c. Retaining the equipment within the facility; or **d.** Obtaining an exemption, in writing, from the CIO or his/her designated representative explicitly authorizing removal of the equipment from the facility.		**d.** Obtaining an exemption from organization-defined personnel or roles explicitly authorizing removal of the equipment from the facility.	
Control	**N/A**	**Control**	**Execution with Privilege**
New NIST SP 800-53 Rev.5 Control and applicable to ARC-AMPE.		**MA-03(05): Execution with Privilege** Monitor the use of maintenance tools that execute with increased privilege.	
Control	**N/A**	**Control**	**Software Updates and Patches**
New NIST SP 800-53 Rev.5 Control and applicable to ARC-AMPE.		**MA-03(06): Software Updates and Patches** Inspect maintenance tools to ensure the latest software updates and patches are installed.	
Control	**Nonlocal Maintenance**	**Control**	**Nonlocal Maintenance**
MA-4: Nonlocal Maintenance The organization monitors and controls nonlocal maintenance and diagnostic activities; and prohibits nonlocal system maintenance unless explicitly authorized, in writing, by the CIO or his/her designated representative. If nonlocal maintenance and diagnostic actives are authorized, the organization: **a.** Allows the use of nonlocal maintenance and diagnostic tools only as consistent with organizational policy and documented in the security plan for the information system; **b.** Employs multi-factor authentication in the establishment of nonlocal maintenance and diagnostic sessions; **c.** Maintains records for nonlocal maintenance and diagnostic activities; and **d.** Terminates all sessions and network connections when nonlocal maintenance is completed. **Implementation Standards** **1.** If password-based authentication is used during remote maintenance, change the passwords following each remote maintenance service. **2.** Media used during remote maintenance must be sanitized in accordance with NIST SP 800-88, as amended.		**MA-04: Nonlocal Maintenance** **a.** Approve and monitor nonlocal maintenance and diagnostic activities; **b.** Allow the use of nonlocal maintenance and diagnostic tools only as consistent with organizational policy and documented in the security plan for the system; **c.** Employ strong authentication in the establishment of nonlocal maintenance and diagnostic sessions; **d.** Maintain records for nonlocal maintenance and diagnostic activities; and **e.** Terminate session and network connections when nonlocal maintenance is completed.	
Control	**Auditing and Review**	**Control**	**Logging and Review**
MA-4 (1): Auditing and Review The organization: **a.** Audits nonlocal maintenance and diagnostic sessions using available audit events; and **b.** Reviews the records of the maintenance and diagnostic sessions.		**MA-04(01): Logging and Review** **a.** Log organization-defined audit events, as defined in the organization's formal audit policy, for nonlocal maintenance and diagnostic sessions; and **b.** Review the audit records of the maintenance and diagnostic sessions to detect anomalous behavior.	
Control	**Document Nonlocal Maintenance**	**Control**	**N/A**
MA-4 (2): Document Nonlocal Maintenance		**Withdrawn Control**: Incorporated into **MA-01** and **MA-04**.	

MARS-E		ARC-AMPE	
The organization documents in the information system's security plan the policies and procedures for the establishment and use of nonlocal maintenance and diagnostic connections.			
Control	**N/A**	**Control**	**Authentication and Separation of Maintenance Sessions**
Existing NIST SP 800-53 Rev.4 control which was not selected for MARS-E 2.2 and is applicable to ARC-AMPE.		**MA-04(04): Authentication and Separation of Maintenance Sessions** Protect nonlocal maintenance sessions by: **a.** Employing organization-defined authenticators that are replay resistant; and **b.** Separating the maintenance sessions from other network sessions with the system by either: **1.** Physically separated communications paths; or **2.** Logically separated communications paths.	
Control	**N/A**	**Control**	**Disconnect Verification**
Existing NIST SP 800-53 Rev.4 control which was not selected for MARS-E 2.2 and is applicable to ARC-AMPE.		**MA-04(07): Disconnect Verification** Verify session and network connection termination after the completion of nonlocal maintenance and diagnostic sessions.	
Control	**Maintenance Personnel**	**Control**	**Maintenance Personnel**
MA-5: Maintenance Personnel The organization: **a.** Establishes a process for maintenance personnel authorization and maintains a list of authorized maintenance organizations or personnel; **b.** Ensures that non-escorted personnel performing maintenance on the information system have required access authorizations; and **c.** Designates organizational personnel with required access authorizations and technical competence to supervise the maintenance activities of personnel who do not possess the required access authorizations.		**MA-05: Maintenance Personnel** **a.** Establish a process for maintenance personnel authorization and maintain a list of authorized maintenance organizations or personnel; **b.** Verify that non-escorted personnel performing maintenance on the system possess the required access authorizations; and **c.** Designate organizational personnel with required access authorizations and technical competence to supervise the maintenance activities of personnel who do not possess the required access authorizations.	
Control	**Individuals without Appropriate Access**	**Control**	**Individuals without Appropriate Access**
MA-5 (1): Individuals without Appropriate Access The organization implements procedures for the use of maintenance personnel that lack appropriate security clearances or are not U.S. citizens, that include the following requirement: **a.** Maintenance personnel who do not possess the needed access authorizations, clearances, or formal access approvals are escorted and supervised during the performance of maintenance and diagnostic activities on the information system by approved organizational personnel who are fully cleared, have appropriate access authorizations, and are technically qualified.		**MA-05(01): Individuals without Appropriate Access** **a.** Implement procedures for the use of maintenance personnel who lack appropriate security clearances or are not U.S. citizens that include the following requirements: **1.** Maintenance personnel who do not have needed access authorizations, clearances, or formal access approvals are escorted and supervised during the performance of maintenance and diagnostic activities on the system by approved organizational personnel who are fully cleared, have appropriate access authorizations, and are technically qualified; and **2.** Prior to initiating maintenance or diagnostic activities by personnel who do not have needed access authorizations, clearances, or formal access approvals, all volatile information storage components within the system are sanitized and all nonvolatile storage media are removed or physically disconnected from the system and secured; and	

MARS-E		ARC-AMPE	
		b. Develop and implement organization-defined alternate controls in the event a system component cannot be sanitized, removed, or disconnected from the system.	
Control	**Timely Maintenance**	**Control**	**Timely Maintenance**
MA-06: Timely Maintenance The organization obtains maintenance support and/or spare parts for defined key information system components (defined in the applicable security plan) within the applicable Recovery Time Objective (RTO) specified in the contingency plan.		**MA-06: Timely Maintenance** Obtain maintenance support and/or spare parts for organization-defined information system component within the applicable Recovery Time Objective (RTO) (specified in the system Contingency Plan) of failure.	
Control	**N/A**	**Control**	**Preventive Maintenance**
Existing NIST SP 800-53 Rev.4 control which was not selected for MARS-E 2.2 and is applicable to ARC-AMPE.		**MA-06(01): Preventive Maintenance** Perform preventive maintenance on system component at applicable Recovery Time Objective (RTO) time intervals specified in the system Contingency Plan (CP).	

References

NIST SP 800-53 Revision 5.1.1

NIST SP 800-53 Revision 4

CMS Standards

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About Coalfire

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WP_ACA CMS Controls Migration (Maintenance (MA))_03102025