



MANUAL TRANSMITTAL

Department of the Treasury
Internal Revenue Service

10.8.9

MAY 11, 2018

EFFECTIVE DATE

(06-30-2018)

PURPOSE

- (1) This transmits revised Internal Revenue Manual (IRM) 10.8.9, *Information Technology (IT) Security, Virtualization Security Policy*.

BACKGROUND

- (1) This Internal Revenue Manual (IRM) defines the security controls for the use of virtualized environments within the IRS.
- (2) FIPS 200 mandates the use of National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 as an initial set of baseline security controls for the creation of agency IT security policy.
- (3) IRM 10.8.9 is part of the Security, Privacy and Assurance policy family, IRM Part 10 series for IRS Information Technology Cybersecurity.

MATERIAL CHANGES

- (1) The following sections have been updated and clarified with this version of policy:
 - a. Restructured IRM to align with NIST controls.
 - b. Clarification of terminology in glossary regarding Hypervisor, Virtual Machine Host, Virtualization and numerous other new definitions added to glossary.
 - c. Restructured Manual Transmittal, Introductory sections, Risk Acceptance and Risk-Based Decisions section, and Glossary and Acronyms (combined) to match standardized Security Policy language.
 - d. Updated hyperlinks throughout the document to reflect new updated organizational links URL(s).
 - e. Removed reference to IRM 10.8.3 (obsolete)
 - f. Changed Effective Date from 04-29-2016 to 06-30-2018
 - g. Additional language for Security control SC-28 Protection of Information at Rest, added: Note added after both SRG requirements (See IRM 10.8.1, SC-28 Protection of Information at Rest for any exceptions to this requirement.)
- (2) Editorial changes (including grammar, spelling, and minor clarification) were applied throughout the IRM.

EFFECT ON OTHER DOCUMENTS

This IRM supersedes all prior versions of IRM 10.8.9. This IRM supplements IRM 10.8.1, *Information Technology (IT) Security Policy and Guidance*; and IRM 10.8.2, *Information Technology Security Roles and Responsibilities*.

AUDIENCE

IRM 10.8.9 shall be distributed to all individuals and organizations having contractual arrangements with the IRS, contractors, vendors, and outsourcing providers, which install, use, or operate virtualization, and store, process, or transmit IRS data. This policy applies to all employees, contractors, and vendors of the IRS.

S. Gina Garza
Chief Information Officer

10.8.9.1
(05-11-2018)
Program Scope and Objectives

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- (2) Audience: The provisions in this manual apply to:
 - a. All offices and business, operating, and functional units within the IRS, and are to be applied.
 - b. Individuals and organizations having contractual arrangements with the IRS, including employees, contractors, vendors, and outsourcing providers, which use or operate information systems that store, process, or transmit IRS Information or connect to an IRS network or system.
- (3) Policy Owner: Chief Information Officer
- (4) Program Owner: Architecture and Implementation, an organization within Cybersecurity

10.8.9.1.1
(05-11-2018)
Scope

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- (2) The provisions in this manual apply to:
 - a. All offices and business, operating, and functional units within the IRS.
 - b. Individuals and organizations having contractual arrangements with the IRS, including employees, contractors, vendors, and outsourcing providers, which use or operate information systems that store, process, or transmit IRS Information or connect to an IRS network or system.
 - c. All IRS information and information systems. For information systems that store, process, or transmit classified information, please refer to IRM 10.9.1, **National Security Information**, for additional procedures for protecting classified information.
- (3) The IRS shall ensure that the product (e.g., software, hardware) and version selected is in accordance with IRS Enterprise Architecture (EA) Enterprise Standards Profile (ESP) that dictates the official products and versions within the IRS.

- (4) The IRS shall ensure the application or system version is a version for which the vendor still offers standardized technical support.
- (5) In the event there is a discrepancy between this IRM and IRM 10.8.1, IRM 10.8.1 takes precedence, unless the security controls/requirements in this policy are more restrictive or otherwise noted.

10.8.9.1.2
 (05-11-2018)
Objectives

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- (2) It is acceptable to configure settings to be more restrictive than those defined in this IRM.
- (3) To configure less restrictive controls requires a risk-based decision. See the Risk Acceptance and Risk-Based Decisions section within this IRM for additional guidance.

10.8.9.1.3
 (05-11-2018)
Background

- (1) This IRM defines the security controls for the use of a virtualized environment within the IRS.
- (2) FIPS 200 mandates the use of National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 as an initial set of baseline security controls for the creation of agency IT security policy.
- (3) IRM 10.8.9 is part of the Security, Privacy and Assurance policy family, IRM Part 10 series for IRS Information Technology Cybersecurity.

10.8.9.1.4
 (05-11-2018)
Authority

- (1) IRM 10.8.1, *Information Technology (IT) Security, Policy and Guidance*, establishes the security program and the policy framework for the IRS.
- (2) This IRM augments the IT security controls as defined in:
 - IRM 10.8.1, IRM 10.8.2, *Information Technology (IT) Security, Roles and Responsibilities*
 - IRM 10.8.21, *Information Technology (IT) Security, Database Security Policy*
 - IRM 10.8.22, *Information Technology (IT) Security, Web Server Security Policy*
 - and the OS IRMs (i.e., IRM 10.8.7; IRM 10.8.10; IRM 10.8.20; IRM 10.8.30; IRM 10.8.32) to include comprehensive guidance on the implementation of Virtual Computing Environment Security.

10.8.9.1.5
 (05-11-2018)
Risk Acceptance and Risk-Based Decisions

- (1) Any exception to this policy requires that the Authorizing Official (AO) make a Risk-Based Decision.

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Exhibit 10.8.9-1 (05-11-2018)

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