SmartSuite

Framework / Cybersecurity / NIST Special Publications

NIST SP 800-53 Rev. 4 Moderate-Impact Security Control Baseline (Appendix D; withdrawn September 23, 2021)

The withdrawn NIST SP 800-53 Rev. 4 moderate-impact baseline: triggered when any FIPS 199 objective is moderate and none high, 159 controls and 102 enhancements, tailored under Section 3.2.



What it is

The moderate-impact security control baseline of NIST SP 800-53 Revision 4 is the subject of this page, and it belongs to a withdrawn publication: NIST retired Rev. 4 on September 23, 2021 in favor of NIST SP 800-53 Rev. 5 , whose baselines now sit in NIST SP 800-53B . Section 3.1 of Rev. 4 assigned the moderate baseline to any system that FIPS 199 rated moderate on at least one of confidentiality, integrity or availability and high on none, applying the high water mark rule of FIPS 200.

NIST's OSCAL profile of the Rev. 4 moderate baseline (version 2015-01-22) contains 261 items, 159 base controls and 102 control enhancements, which is 137 more than the low baseline: 44 additional base controls and 93 additional enhancements. Those additions are where moderate differs in kind from low.

At a glance

PUBLISHER
National Institute of Standards and Technology (NIST)

TYPE
Control Framework

VERSION
Revision 4 (April 2013; updated January 22, 2015); withdrawn September 23, 2021

EFFECTIVE
April 2013

DOMAIN
Cybersecurity

FAMILY
NIST Special Publications

REGION
United States

INDUSTRY
Government & Public Sector

ADOPTION MODEL
Regulatory Compliance

IMPLEMENTATION COMPLEXITY
High

Source: csrc.nist.gov/pubs/sp/800/53/r4/upd3/final

Why it matters

- **The step up that matters most** Moderate adds 44 base controls and 93 enhancements to the low set in NIST's OSCAL profile, among them AC-5, AC-6, CM-3, CP-7 and SC-8, so the difference from low is substantive rather than incremental.
- **Protection in transit and at rest** SC-8 Transmission Confidentiality and Integrity, SC-28 Protection of Information at Rest and SI-7 Software, Firmware, and Information Integrity are Not Selected at low and selected at moderate (Table D-2).
- **Continuity beyond a written plan** CP-6 Alternate Storage Site, CP-7 Alternate Processing Site, CP-8 Telecommunications Services and the CP-4 (1) testing enhancement appear for the first time in the moderate column.
- **Downgrading with a rule** Section 3.2 lists the controls that support a single security objective and may be downgraded when the system is moderate on a different objective, subject to three conditions.

Updated Oct 15, 2026 · © 2026 SmartSuite Inc. All rights reserved.

How SmartSuite supports NIST 800-53 Rev.4 Moderate

Moderate Baseline Register

Load the 159 controls and 102 enhancements from the Table D-2 moderate column as records with family, number, priority code and implementation status.

Categorization and High Water Mark

Record the FIPS 199 rating per objective and information type, so the objective that made the system moderate is visible when Section 3.2 downgrades are considered.

Security Objective Downgrades

Track each single-objective control considered for downgrading with the three Section 3.2 conditions, the risk assessment relied on and the approving official.

Compensating Controls and Parameters

Record compensating controls with their rationale and accepted risk, and the organization-defined parameter values fixed for each control's assignment and selection statements.

Assessment Evidence and Findings

Attach evidence to each control in Compliance Management and log assessment results and open findings against the control number.

Map to the Rev. 5 Moderate Baseline

Link each record to its SP 800-53B moderate counterpart and track the gap to the 177 controls and 110 enhancements in the current profile.

Common framework mappings

CIS Controls v8.1 | COBIT 2019 | FedRAMP Rev. 5 | HIPAA | ISO 27001:2022 | NIST CSF 2.0 | PCI DSS 4.0.1 | SOC 2

Official resources

NIST SP 800-53 Revision 4

Provides comprehensive security and privacy controls for federal information systems, with low, moderate and high baselines.

csrc.nist.gov/publications/detail/sp/800-53/rev-4/final

NIST Risk Management Framework (RMF) Overview

Describes the integration of NIST SP 800-53 controls within the Risk Management Framework.

csrc.nist.gov/projects/risk-management

SP 800-53 Controls Catalog

Outlines detailed control families and requirements mandated by NIST SP 800-53.

csrc.nist.gov/publications/sp800

NIST SP 800-53 Implementation Guide

Offers guidance on implementing and tailoring controls specific to organizational needs.

csrc.nist.gov/publications/detail/sp/800-53A/rev-4/final

Frequently asked questions

When does a system take the Rev. 4 moderate baseline?

Section 3.1 applies the FIPS 200 high water mark to the FIPS 199 categorization: a system is moderate-impact when at least one of confidentiality, integrity or availability is rated moderate and none is rated high. A system rated moderate on a single objective and low on the other two takes the full moderate baseline, which is why Section 3.2 then allows single-objective controls to be downgraded.

How many controls does the Rev. 4 moderate baseline contain?

NIST's OSCAL profile of the Rev. 4 moderate baseline (version 2015-01-22) lists 261 items: 159 base controls and 102 control enhancements. The printed source is Table D-2 in Appendix D, where the moderate column shows each selected control with its enhancement numbers in parentheses, for example AC-2 (1) (2) (3) (4), and Not Selected where a control is left to tailoring.

What does the moderate baseline add to the low baseline?

137 items: 44 base controls and 93 enhancements, according to the two OSCAL profiles. New base controls include AC-4 Information Flow Enforcement, AC-5 Separation of Duties, AC-6 Least Privilege, CM-3 Configuration Change Control, CP-6, CP-7 and CP-8 for alternate sites and telecommunications, IR-3 Incident Response Testing, SC-8 Transmission Confidentiality and Integrity and SC-28 Protection of Information at Rest; new enhancements include CP-2 (1) (3) (8), RA-5 (1) (2) (5) and SI-4 (2) (4) (5).

Can a moderate system implement some controls at the low level?

Yes, under the security objective-related considerations in Section 3.2. A control that supports only one objective may be downgraded to its lower-baseline form when the downgrade reflects the FIPS 199 category for that objective, is supported by an organizational risk assessment and does not reduce protection of security-relevant information; Rev. 4 gives CP-2(1) as the example and lists the candidate controls for confidentiality, integrity and availability. The decision is documented in the security plan (Section 3.4).

What replaced the Rev. 4 moderate baseline?

The moderate baseline in NIST SP 800-53B, published with SP 800-53 Rev. 5 when the baselines were separated from the catalog. SP 800-53B Section 2.2 uses the same trigger, its Tables 3-1 to 3-20 list the moderate column, and NIST's OSCAL Release 5.2.0 profile holds 177 controls and 110 enhancements. Rev. 4 was withdrawn on September 23, 2021, so new selections start from SP 800-53B.

License included / downloadable: Yes The Rev. 4 moderate baseline is part of NIST SP 800-53 Rev. 4, which NIST provides free of charge as an archived, withdrawn publication that is not subject to copyright in the United States.

Full framework page and mappings: smartsuite.com/frameworks/nist-sp-800-53-rev-4-moderate-baseline