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NIST SP 800-53 Rev. 4 High-Impact Security Control Baseline (Appendix D; withdrawn September 23, 2021)

The withdrawn NIST SP 800-53 Rev. 4 high-impact baseline: any FIPS 199 objective high, 170 controls and 173 enhancements including eleven high-only controls, tailored under Section 3.2.



What it is

NIST SP 800-53 Revision 4 was withdrawn on September 23, 2021 and superseded by NIST SP 800-53 Rev. 5 , so the high-impact security control baseline described on this page is a historical one; its current counterpart is the high baseline in NIST SP 800-53B . Rev. 4 assigned the high baseline to any system that FIPS 199 rated high on confidentiality, integrity or availability, the top of the FIPS 200 high water mark (Section 3.1); the parent Rev. 4 page covers the catalog as a whole.

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Revision 4 (April 2013; updated January 22, 2015); withdrawn September 23, 2021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

- **Developer and supply chain controls arrive** SA-12 Supply Chain Protection, SA-15, SA-16 and SA-17 are Not Selected at low and moderate and selected at high (Table D-2), the first point at which Rev. 4 made these obligations part of a baseline.
- **Penetration testing becomes baseline** CA-8 Penetration Testing is selected only in the high column, so a high system is tested beyond control-by-control review.
- **Contingency planning at full strength** The high baseline adds thirteen Contingency Planning enhancements to the moderate set, including CP-2 (2) (4) (5), CP-4 (2), CP-6 (2), CP-7 (4), CP-8 (3) (4) and CP-9 (2) (3) (5).
- **Audit records protected and attributable** AU-10 Non-repudiation, AU-5 (1) (2) and AU-9 (2) (3) are selected only at high, alongside AU-12 (1) (3) and AU-6 (5) (6).

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How SmartSuite supports NIST 800-53 Rev.4 High

High Baseline Register

Load the 170 controls and 173 enhancements from the Table D-2 high column as records with family, number, priority code and implementation status.

Developer Obligations (SA-15 to SA-17)

Track the development process, developer training and security architecture evidence that these high-only controls require, by development contract and system.

Supply Chain Protection (SA-12)

Hold the SA-12 protections in Third Party Risk Management by supplier and component, with the assessment and monitoring status of each.

Penetration Testing (CA-8)

Schedule the penetration tests the high baseline requires, record scope and findings, and link each finding to the control it concerns.

Tailoring and Downgrade Record

Record each Section 3.2 decision, including CM-7 (5), any single-objective downgrade and every compensating control, with the rationale and the approving official (Section 3.4).

Map to the Rev. 5 High Baseline

Link each record to its SP 800-53B high counterpart and track the gap to the 188 controls and 182 enhancements in the current profile.

Common framework mappings

CIS Controls v8.1 | CSA CCM v4 | FedRAMP Rev. 5 | FISMA | 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

Security and Privacy Controls for Federal Information Systems

Provides guidelines for selecting and specifying controls in U.S. federal systems.

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

Risk Management Framework (RMF) Overview

Outlines the RMF and details integration of NIST SP 800-53 controls.

csrc.nist.gov/publications/detail/sp/800-37/rev-2/final

Federal Information Security Modernization Act (FISMA) Guidance

Describes responsibilities for NIST SP 800-53 within FISMA compliance.

csrc.nist.gov/topics/laws-and-regulations/laws/fisma

Frequently asked questions

What makes a system high-impact under NIST SP 800-53 Rev. 4?

Section 3.1 applies the FIPS 200 high water mark: a system is high-impact when at least one of confidentiality, integrity or availability is rated high under FIPS 199, whatever the other two ratings are. The organization then selects the high column of Table D-2 in Appendix D as its initial baseline and tailors it under Section 3.2.

How many controls are in the Rev. 4 high baseline?

NIST's OSCAL profile of the Rev. 4 high baseline (version 2015-01-22) lists 343 items: 170 base controls and 173 control enhancements. That is 83 more than the moderate baseline, made up of 11 base controls and 72 enhancements, according to the same OSCAL source; Table D-2 is the printed listing.

Which controls are selected only in the high baseline?

Eleven base controls: AC-10 Concurrent Session Control, AU-10 Non-repudiation, CA-8 Penetration Testing, PE-18 Location of Information System Components, SA-12 Supply Chain Protection, SA-15 Development Process, Standards, and Tools, SA-16 Developer-Provided Training, SA-17 Developer Security Architecture and Design, SC-3 Security Function Isolation, SC-24 Fail in Known State and SI-6 Security Function Verification, each shown as Not Selected at low and moderate in Table D-2. Seventy-two enhancements are high-only as well, such as IR-2 (1) (2), CP-4 (2) and AU-9 (2) (3).

Is the high baseline a superset of the moderate baseline?

Almost. Appendix D says the baselines are hierarchical in the strength of each control's requirements, and every moderate item except one also appears at high. The exception is CM-7 Least Functionality: Table D-2 selects enhancements (1) (2) (4) at moderate and (1) (2) (5) at high, so a system moving from moderate to high replaces (4) with (5) rather than adding to it.

Where is the high baseline now that Rev. 4 is withdrawn?

In NIST SP 800-53B, published with SP 800-53 Rev. 5 when the baselines were taken out of the catalog. Section 2.2 of SP 800-53B keeps the same trigger, Tables 3-1 to 3-20 list the high column, and NIST's OSCAL Release 5.2.0 profile holds 188 controls and 182 enhancements; Release 5.2.0 of August 27, 2025 made no changes to the baselines. Rev. 4 was withdrawn on September 23, 2021.

License included / downloadable: Yes The Rev. 4 high baseline is part of NIST SP 800-53 Rev. 4, archived by NIST as a withdrawn publication and available free of charge; NIST asserts no copyright over it in the United States.

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