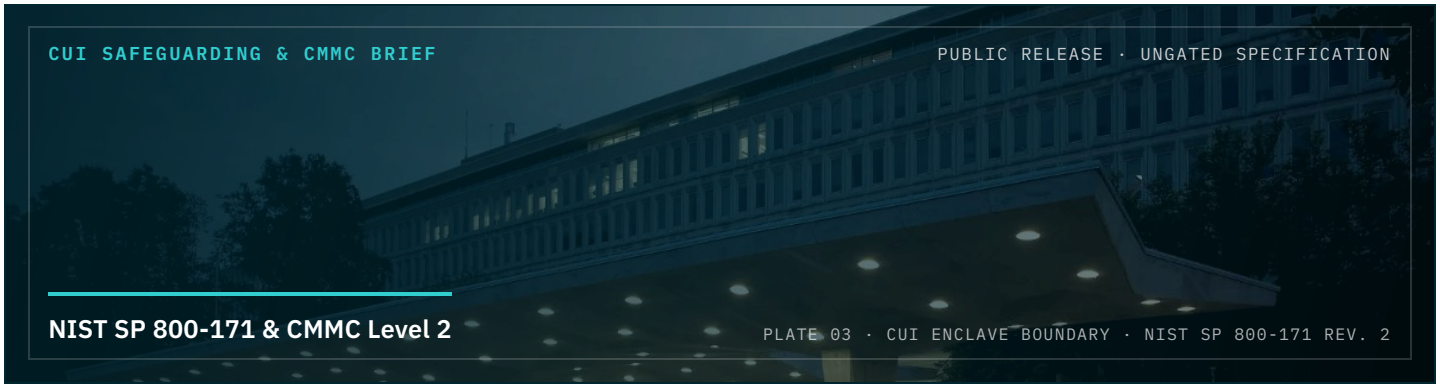

NIST SP 800-171 Rev. 2, SPRS Evidence and CMMC Readiness

Back every affirmed SPRS point and all 110 CUI safeguarding requirements with timestamped cloud evidence.

110	14	-203..110	30 Days
NIST SP 800-171 Rev. 2 Requirements	CUI Security Control Families	DoD SPRS Scoring Scale	Optional Fixed-Fee Readiness Scope

Organizations handling Controlled Unclassified Information under NIST SP 800-171 Rev. 2 and DFARS 252.204-7012 must maintain documented implementation evidence across all 110 security requirements and affirm an accurate SPRS score backed by a living System Security Plan.

01 / ASSESSMENT GAP

Affirmed Scores Without Underlying Evidence Create Audit Risk

Many teams calculate a one-time SPRS score in a spreadsheet without linking the 320 NIST SP 800-171A assessment objectives to live cloud configuration state. When cloud settings drift or a C3PAO requests objective evidence per requirement, teams scramble to reconstruct historical proof.

02 / ARCHITECTURAL RESPONSE

110 Requirements Traced to Live Cloud Configuration

PolicyCortex maintains a requirement-by-requirement register across all 14 families of NIST SP 800-171 Rev. 2, linking Azure, AWS, and Google Cloud posture observations to NIST SP 800-171A assessment objectives, weighted SPRS deductions (-1, -3, and -5), and open POA&M items.

When preparing for an internal affirmation or an independent C3PAO assessment, teams export a complete handoff bundle containing the SSP, requirement traceability matrix, POA&M workbook, OSCAL JSON, and offline SHA3-256 verification script.

CORE ARCHITECTURAL PILLARS

01 All 110 Requirements

Every NIST SP 800-171 Rev. 2 requirement across 14 families mapped to cloud configuration checks and 800-171A objectives.

02 Defensible SPRS Scoring

Weighted DoD Assessment Methodology deductions (-203 to +110 scale) tied directly to passing rows and documented POA&Ms.

03 C3PAO Handoff Bundle

Export organized SSP narratives, POA&M spreadsheets, and hash-chained evidence archives an assessor checks offline.

DOCUMENT CONTROL

DOCUMENT ID	PCX-SB-2026-03
FRAMEWORK	NIST SP 800-171 Rev. 2
METHODOLOGY	DoD SPRS v1.2.1 (-203..110)
HANDOFF	C3PAO & eMASS Bundle
DISTRIBUTION	Public · Ungated PDF

01 / OPERATIONAL MODEL

From CUI cloud enclave to C3PAO-verifiable handoff

PolicyCortex keeps CUI enclave boundaries, SPRS score evidence, and assessor handoff documentation aligned every day.

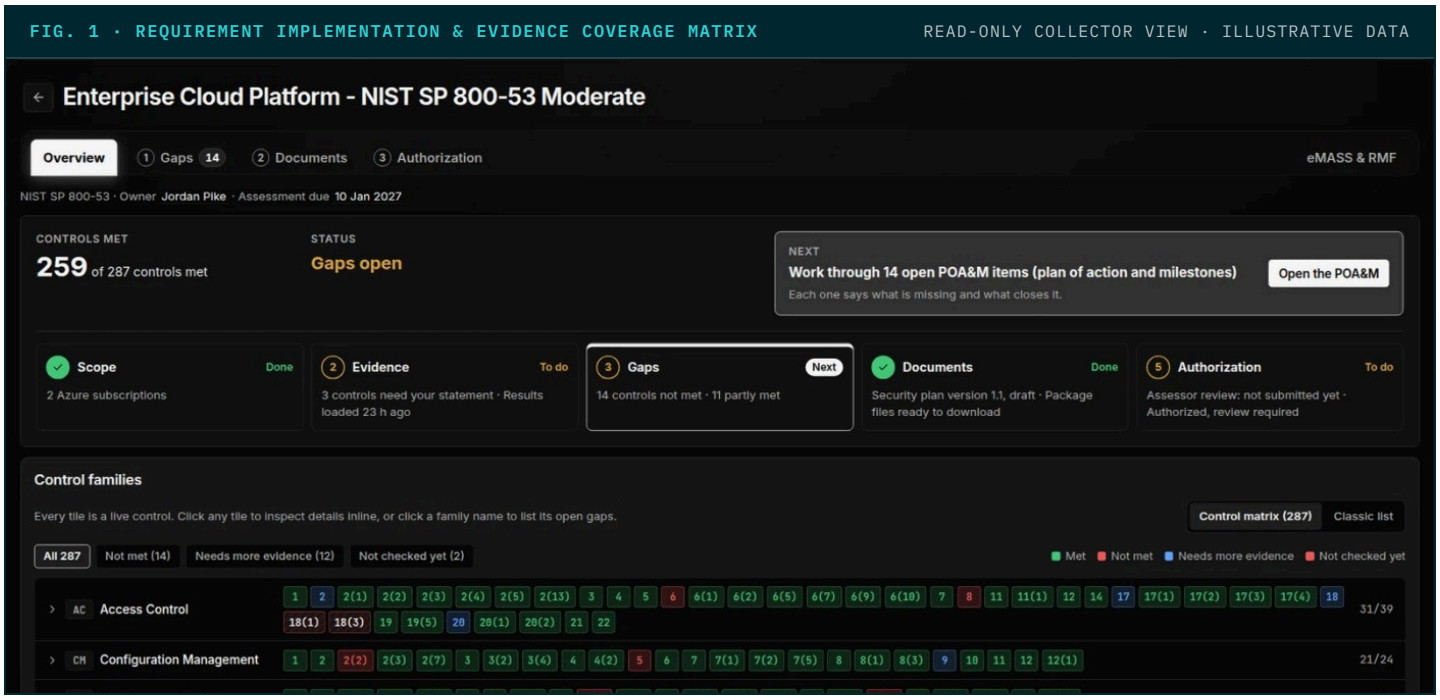

FIG. 1. *PolicyCortex requirement-by-requirement implementation register mapping live cloud configuration evidence, artifact counts, and open POA&M items across control families. Illustrative demonstration dataset.*

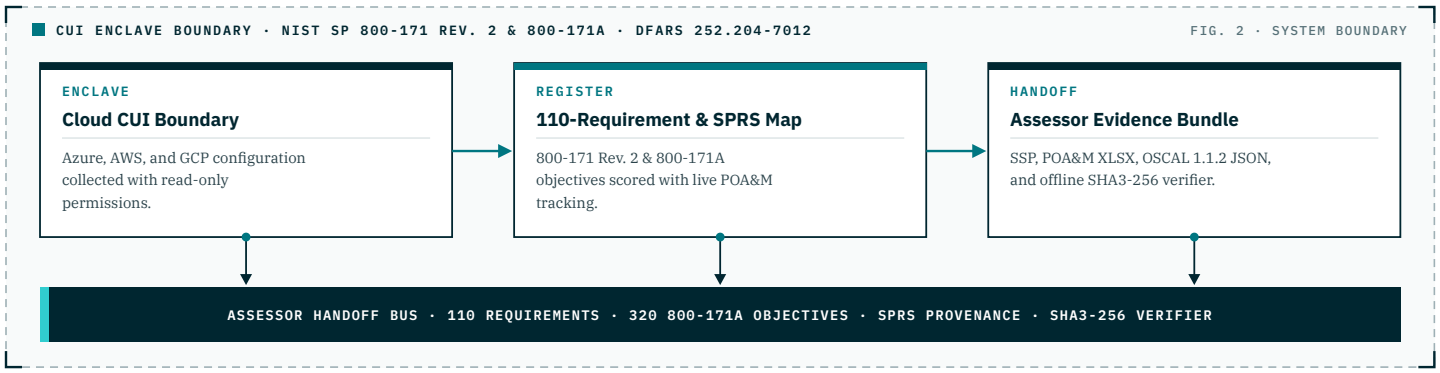

FIG. 2. *Every SPRS point and SSP statement links back to timestamped collector observations.*

01
Enclave boundary clarity
Scope CUI assets, security protection assets, and contractor risk-managed assets cleanly so out-of-scope workloads do not muddy assessment evidence.

02
Exact DoD SPRS math
Track 1-point, 3-point, and 5-point requirement weights accurately, including special partial-credit rules for MFA and FIPS-validated cryptography documentation.

03
30-day readiness scope
Pair the software with a founder-led 30-day engagement for one primary cloud environment, including support through assessor review (no certification guarantee).

04
Ungated public tools
Use PolicyCortex's public 110-requirement hub, interactive SPRS score calculator, and CMMC Level 2 readiness checklist before signing a contract.

02 / CAPABILITY & ARTIFACT SPECIFICATION

Platform modules and synchronized package deliverables

Every authorization narrative, spreadsheet, and machine-readable JSON file compiles from one timestamped snapshot.

Requirement & Score Tracking A.1

14 Control Families
Access Control, Audit & Accountability, Configuration Management, Identification & Authentication, System & Communications Protection, and more.

SPRS Score Provenance
Every deduction and affirmed point links directly to timestamped technical and procedural evidence.

DFARS 252.204-7012 Alignment
Maintain safeguarding records and boundary documentation required for annual affirmations.

Cloud Enclave Collection A.2

Read-Only Collector Fleet
30 Azure collectors, 9 AWS collectors, and GCP posture checks cover CUI boundary resources.

Declared Gap Handling
Paused or unreachable collectors appear as explicit gaps rather than silent green checks.

Assessor Handoff & Delivery B.1

eMASS & C3PAO Package
Structured export folders for SSP, SAR, POA&M, OSCAL, and Evidence_History.

Independent Verification
Assessors run verify_ledger.py locally without needing credentials to PolicyCortex.

Cleared Founder Engagement
Optional 30-day fixed-fee readiness delivery led personally by the founder (active DoD Secret and DoE Q clearances).

Public Scoping Utilities B.2

110-Requirement Hub
Search every NIST SP 800-171 Rev. 2 requirement and 800-171A objective online.

Interactive Calculators
Compute DoD SPRS scores and work the CMMC Level 2 checklist with zero form gate.

TABLE 1 · SYNCHRONIZED PACKAGE DELIVERABLES GENERATED FROM ONE RECORD

ARTIFACT	FORMAT / SCHEMA	PRIMARY CONSUMER	VERIFICATION BASIS
CUI System Security Plan	Word DOCX · PDF · OSCAL 1.1.2	C3PAO Lead Assessor / FSO	110-requirement linkage
SPRS Score Evidence Ledger	XLSX · Recomputable JSON	Annual Executive Affirmation	Weighted -1 / -3 / -5 trace
110-Control POA&M Workbook	eMASS XLSX · OSCAL POA&M	ISSO / Engineering Lead	180-day closeout tracking
800-171A Objective Matrix	Structured CSV / JSON	C3PAO Interview & Test	320 objective pointers
Offline Evidence Archive	manifest.v2.json + ledger.jsonl	Independent C3PAO Team	verify_ledger.py (offline)

OFFLINE CRYPTOGRAPHIC VERIFICATION SPECIMEN

```
> python3 verify_ledger.py --package cmmc-l2-c3pao-handoff.zip
requirements: 110/110 indexed · objectives: 320 · sprs_rows: verified · chain: INTACT (SHA3-256)
· exit 0
```

ZERO VENDOR LOGIN
OFFLINE VERIFIABLE

03 / EVALUATION & DEPLOYMENT PATH

Read-only onboarding and verifiable handoff sequence

Begin with scoped read-only cloud permissions and independently validate exported packages before enabling any write path.

PHASE 01

Baseline All 110 Requirements

Connect read-only cloud collectors and review automated vs. procedural coverage across your CUI boundary.

OUTPUT: Scoped CUI enclave & gap map

PHASE 02

Document SSP & Open POA&Ms

Close high-weight 5-point and 3-point gaps first and bind remaining milestones to dated POA&M records.

OUTPUT: Defensible SPRS + POA&M table

PHASE 03

Affirm & Export Assessor Bundle

Back your SPRS affirmation and C3PAO review with a hash-chained evidence package verified offline.

OUTPUT: C3PAO ZIP + offline proof

TABLE 2 · DEPLOYMENT TOPOLOGY & ASSURANCE BOUNDARIES

ATTRIBUTE	CUSTOMER-OPERATED SOVEREIGN TENANT	US HOSTED AZURE SERVICE
Execution Boundary	Runs inside your own Azure or AWS subscription; raw state stays in-tenant	Managed in PolicyCortex's US AWS environment for rapid team onboarding
Outbound Telemetry	Zero telemetry or evidence leaves your boundary to PolicyCortex servers	Isolated per-tenant storage with explicit data boundary controls
Default Cloud Access	Read-only cloud permissions agreed up front with your security team	Read-only cloud permissions; write actions require explicit opt-in gates
Assessor Verification	Offline Python verifier (verify_ledger.py) checks SHA3-256 chain locally	Identical offline ZIP archive, OSCAL 1.1.2 JSON, and SHA3-256 verifier
Procurement & Delivery	SAM Registered (CAGE 19CQ3); cleared founder-led onboarding available	Direct commercial or federal procurement with optional 30-day scope

Reference directory and public verification artifacts

04 / UNGATED RESOURCES

Browse the complete NIST SP 800-171 Rev. 2 110-Requirement Hub	policycortex.com/nist-800-171
Compute your score with the interactive SPRS Score Calculator	policycortex.com/sprs-score-calculator
Work through the ungated CMMC Level 2 Readiness Checklist	policycortex.com/cmmc-checklist
Inspect the eMASS and C3PAO handoff package structure	policycortex.com/cmmc/emass-c3pao-handoff

Primary online specification and live interactive exhibits policycortex.com/solutions/nist-800-171 →

PolicyCortex

policycortex.com gov@policycortex.com

SAM REGISTERED FEDERAL CONTRACTOR · CAGE 19CQ3

© 2026 PolicyCortex, Inc. All rights reserved. Specifications reflect audited product capabilities as of November 2026 and are published without registration gates for technical and assessor review. Document ID: PCX-SB-2026-03.