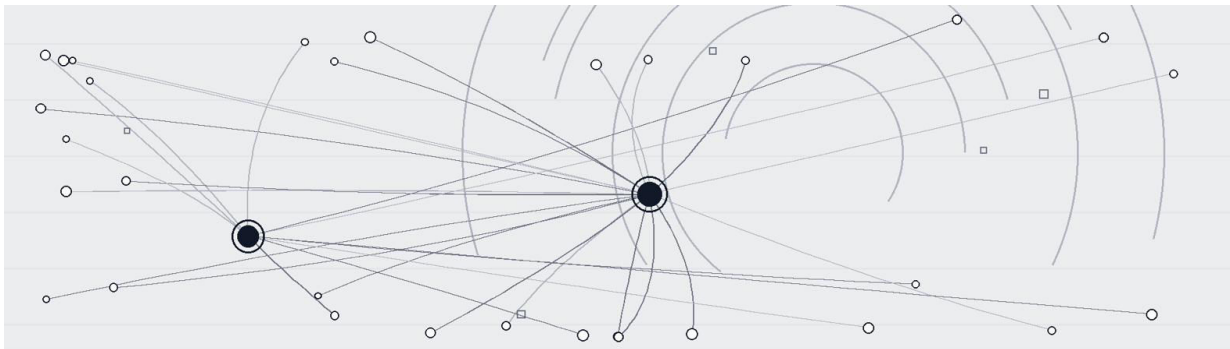


AUGUST 2026
APPLIED QUANTUM

THE APPLIED QUANTUM CCF INSTRUMENT DETERMINATION LOG TEMPLATE



The judgment trail of the assessment, recorded before anything is computed from it

Version 1.0-RC – August 2026

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Disclosure: Applied Quantum provides post-quantum migration advisory services. This work is published openly under CC BY 4.0 and is computable without engaging Applied Quantum.

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The reference implementation and canonical test vectors publish separately under Apache-2.0 on the Applied Quantum GitHub. Neither licence reads onto the other.

DISCLAIMER

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The regulatory instruments, certification records, standards and vendor capabilities referenced in this document reflect the state of the landscape as of August 2026, and that landscape moves. Readers should verify current status against primary sources (regulators and supervisory authorities, NIST, EMVCo and PCI SSC, the CycloneDX specification, public certification listings, vendor documentation) before making decisions.

References to specific vendors, products or tools are for illustrative purposes and do not constitute endorsement.

This is a v1.0 release candidate: v1.0 final publishes in November 2026 after a pilot cycle. Open items are public on the roadmap at [CCFramework.org](https://ccframework.org), and corrections are published as dated entries on its errata page.

ABOUT THIS DOCUMENT

Document type	CCF instrument – determination log template
Parent document	The Cryptographic Concentration Framework – Universal – v1.0-RC (August 2026)
Intended audience	Assessment leads recording judgments, and the reviewers and validators who audit them
Assumed knowledge	The Universal Framework's determination rules and evidence standards
Scope	The judgment trail of the assessment – determinations, exclusions and evidence grades – recorded before anything is computed from them.

Status	Version 1.0-RC – release candidate; v1.0 final November 2026 after pilot
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VERSION HISTORY

Version	Date	Changes
1.0-RC	August 2026	First published.
1.0-RC	8 September 2026	Entry fields extended (subject references, unknowns and alternatives, output effect, supersession); two worked entries added; the cloud-custody entry counts the boundary as one unit at its known population. Prose revised throughout.

HOW TO USE THIS DOCUMENT

This template records the assessment’s judgments before anything is computed from them. It pairs with the Universal Framework’s determination rules and travels with the assessment into review.

ACCOMPANYING RESOURCES

The framework family publishes at CCFramework.org: the Universal Framework, the Payments and Financial Services extensions, the payments whitepaper, the CBOM Conformance Statement, the Technical Companion and the instruments, together with the public roadmap, the errata and corrections page, the provenance survey and the frontier-census methodology.

Every canonical figure in the family comes from the reference implementation, with ten canonical test vectors that fix each one exactly. Both are open under Apache-2.0 on the Applied Quantum GitHub, and any implementation that reproduces the fixtures is conformant.

The Applied Quantum CBOM Profile, the input data contract, publishes at CBOMProfile.org. The Applied Quantum PQC Migration Framework, whose sector taxonomy the extensions follow, publishes at PQCFramework.org. Practitioner background and adjacent analysis sits on PostQuantum.com, as further reading rather than a normative source.

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Used in Phase 3 of the [CCF Universal Framework](#) v1.0-RC, challenged in Phase 6, and named by the Universal as one of the two blocking instruments. It is also the re-performance record the Conformance Statement's audit-evidence section relies on.

1. USE OF THE LOG

The calculation becomes reproducible only when another reviewer can understand how ambiguous facts were treated. This log records the judgements connecting source evidence to the assessment: what was observed, what remained uncertain, which rule was applied and why.

Maintain one controlled log per assessment, with one entry per determination. Write the entry when the call is made, before any figure that depends on it is computed. Do not reconstruct entries at reporting time.

Link entries to the affected service, asset or relationship and output cell. Supporting evidence may remain in a separate repository, but the entry must identify the exact record and revision. A reference to "the vendor response" without product, date or claim scope is insufficient for a material decision.

Phase 6 reviewers overturn determinations the assessment cannot defend. They can act only on a determination already recorded. Reversals are additive: retain the original treatment, the challenge and the replacement treatment, each dated. No judgement is removed from the log, in line with the corrections policy.

2. DETERMINATIONS REQUIRING AN ENTRY

Record the following cases:

1. Layer resolution ambiguities, including unit assignment where evidence conflicts, policy-root versus cryptographic-root determinations, and boundary treatment for undisclosed cloud sublayers.
2. The five criticality tests, answered by the service or key owner.
3. Failure-impact determinations, covering all five steps of Universal C.5.1, including Not assessable results.
4. Tolerance inheritance choices and NOT MAPPED records.
5. Consequence thresholds adopted, or their recorded absence.
6. Hybrid soundness determinations against the three-condition test in Universal C.6, including every hybrid-unverified state.
7. Movement cause assignments under Universal C.8, with the identity rung recorded under Annex 2 and any identity-inferred match.

8. Equal-tier attribute conflicts merged under Annex 2 and any departure from its counting rules.

9. Coverage-claim challenges and their outcome.

Also record material decisions on canonical identity, cohort counts, layer applicability, composite execution units, ancestry relevance, feasible membership bounds, target-state acceptance and joint population assumptions. Record supplier-status exceptions, other evidence conflicts and material departures from the method.

Routine instances may refer to an approved precedent where the fact pattern genuinely matches it; the precedent must identify its scope and conditions rather than become an unrestricted exception.

A separate entry is not required for every mechanically identical asset. A grouped determination can apply to an explicitly enumerated class or cohort, with its members and cardinality recoverable. Reopen it when the facts or governing rule change.

3. ENTRY STRUCTURE

Field	Required content
Entry ID and date	Stable identifier and the date the judgement was made
Service and cell	Assessment revision, service, affected cell or metric, and relevant function
Subject references	Canonical asset, primary unit, path-state, supplier request or relationship identifiers
Determination type	Counting, applicability, resolution, reach, criticality, coverage, failure impact, movement or governance
Fact pattern	What the evidence showed, stated without the conclusion
Unknowns and alternatives	The unresolved questions and feasible alternative treatments
Treatment	The selected treatment, exact rule/reference, or explicitly stated departure
Reasoning	Why the rule applies and why material alternatives were excluded or retained; the

Field	Required content
	sentence a reviewer reads first
Evidence tiers relied on	Per value, per the claim-specific ladder in Universal A.6; source references, dates, deployment context, contradictions and limitations. Corroboration is recorded separately from the evidence basis
Owner	Accountable decision-maker and independent challenger where required
Output effect	Affected counts, assignments, reach interval, evidenced or bounded membership, coverage state or tolerance conclusion
Challenge status	Unchallenged, challenged-open, challenged-upheld or challenged-reversed, with dates
Reversal note	Where reversed: the new treatment and what changed the call. Supersession: replacement entry, reason, affected reports and approval record

These are assessment-log fields, not additions to the CBOM Profile. For example, a deflected supplier response is recorded declined, with reason "deflected" in the response register. The log supplies the contextual explanation without inventing a new enumeration value. Where a supplier attestation is corroborated against a certification record, record the corroboration separately; its evidence basis remains E4.

4. STANDARD ENTRY FORMAT

4.1 Minimum format

Entry: [ID], [date]
Service / cell: [service], [layer or metric]
Type: [Section 2 case]
Fact pattern: [what the evidence showed]
Treatment: [what was done]
Reasoning: [why]
Tiers: [per value]
Owner: [name, role]

Challenge: [status, date]

4.2 Extended format

Entry / date: [ID and date]
Assessment / service / cell: [references]
Subjects and type: [identifiers and determination type]
Facts: [what the evidence establishes]
Unknowns / alternatives: [what it does not establish]
Treatment / governing rule: [rule and treatment]
Reasoning: [basis for the treatment]
Evidence: [claim, source, date, E-code and limitation]
Owner / reviewer: [names and roles]
Effect on output: [count, assignment, interval or status]
Challenge / supersession: [status, date and successor if any]

5. WORKED ENTRIES

5.1 Undisclosed cloud custody

This is an illustrative record, not a finding about an institution.

Entry: 014, [date]
Service / cell: [service], layer 4 custody
Type: Layer resolution ambiguity – undisclosed cloud sublayers
Fact pattern: Cloud custody service in use. The provider discloses no underlying validated module.
Treatment: Provider recorded as the unresolved visible boundary and counted as one primary unit at its known population. Reach bounds computed per C.3. Lineage, firmware-family, manufacturer and generation fields left unpopulated.
Reasoning: The provider is a boundary, not evidence of the module behind it. Populating identity fields with the provider's name would convert absence into a unit.
Tiers: E3 for the service inventory. The boundary itself carries no tier.
Owner: [name, role]
Challenge: Challenged in Phase 6, upheld.

5.2 Unknown shared generation design

This is an illustrative record, not a finding about an institution.

Entry: DET-021, [assessment date]
Facts: Three identified generation points carry 2,650, 1,050 and 500 assets and conform to one certification profile. Each is assumed for this illustration to use one internal design; no design is disclosed.
Treatment: Report generation-point CCI 4,748 and the profile-only design node at 63.1% known reach against a 100% bound.

Reasoning: The 63.1% is the largest point's own design, a floor by construction, not evidence that two points share a design. Disclosure narrows the bound.

Effect: A potential service-wide design domain requires provenance investigation and an upper-bound scenario assessment; no common design is asserted as fact.

5.3 Incomplete failure-impact facts

This is an illustrative record, not a finding about an institution.

Entry: DET-028, [assessment date]

Facts: A shared signing dependency supports an important service with a defined four-hour availability tolerance. No integrity consequence threshold or evidence of the effect of forged acceptance has been supplied.

Treatment: The integrity scenario is Not assessable. Preserve any separately supported availability result.

Reasoning: Restoring processing within four hours does not establish that a prior forged instruction is an acceptable consequence. The missing threshold cannot be replaced by a Pass.

Action: [Service owner] supplies the consequence determination by [date].

Actual entries require their own source and operational evidence.

6. REVERSAL, PUBLICATION AND RETENTION

A missing operational fact is recorded in a Not assessable entry, not left as a blank row. Never record Pass by default.

Changes are additive. Retain the original judgement, challenge, revised treatment, decision date and affected calculation/report versions. Do not overwrite a judgement so that an earlier published figure can no longer be reconstructed. A correction to evidence is distinguished from an actual deployment change under Universal C.8's movement rules.

The log accompanies the assessment and is available to authorised reviewers. The Conformance Statement uses it as the judgement trail required for re-performance. The entries must support the figure presented in the board report. Sensitive details may be referenced rather than repeated in a board paper.

A material output without the determination required to support it is a control deficiency; absence of a record is not evidence that no judgement was needed. An empty log under a computed heat map is itself a finding.