

REFERENCE {{referenceId}}
STATUS REVIEW READY
OWNER {{documentOwner}}

Technical Specification

An implementation-focused specification covering architecture, interfaces, data models, requirements, constraints, error handling, testing, and operations.

TECHNICAL RELEASE · 4 August 2026



Document contents

Document convention	Value
Status	Review-ready
Owner	Mara Klein
Reference	NS-044-2026

0.1 Summary and scope

State the change, motivation, system boundary, users, requirements, non-goals, owners, status, and related decisions.

Document control	Detail
Owner	Mara Klein
Reference	NS-044-2026
Effective date	4 August 2026
Status	Ready for review

0.2 Current state and constraints

Describe existing architecture, data, interfaces, behavior, debt, operational realities, compliance, and migration constraints. **Review record:** Assign the owner, evidence, dependencies, decision date, and next action.

0.3 Proposed design

Explain components, responsibilities, flows, algorithms, state, dependencies, concurrency, consistency, and important trade-offs.

Requirement	Component	Verification	Status
Proposed design	Core boundary	Automated and review test	Specified
Failure path	Integration boundary	Negative test	In review



0.4 Interfaces and data

Define APIs, events, schemas, validation, identifiers, versioning, compatibility, errors, idempotency, and retention. **Review record:** Assign the owner, evidence, dependencies, decision date, and next action.

0.5 Security and privacy

Cover trust boundaries, authentication, authorization, secrets, encryption, logging, abuse, privacy, and threat mitigations. **Review record:** Assign the owner, evidence, dependencies, decision date, and next action.

0.6 Reliability and operations

Set SLOs, capacity, performance, failure modes, retries, recovery, observability, alerting, runbooks, and ownership. **Review record:** Assign the owner, evidence, dependencies, decision date, and next action.

0.7 Testing and rollout

Define unit, integration, contract, migration, load, security, and acceptance tests plus staged release and rollback. **Review record:** Assign the owner, evidence, dependencies, decision date, and next action.

0.8 Alternatives and open questions

Record rejected designs, consequences, unresolved choices, decision owners, deadlines, and future extension points. **Review record:** Assign the owner, evidence, dependencies, decision date, and next action.