

SOLUTION SCENARIO / AS OF 2026-10-02

Trust operations that survive renewal, revocation and staff changes

Know what is trusted, who owns it, and how trust recovers.

ILLUSTRATIVE / PROPOSED SELECTIONS / MODELED FINANCIAL RESULTS

Every selection, count and cost in this brief is illustrative. No actual customer result is represented.

Scenario and intended outcome

ENVIRONMENT

Illustrative organization with 100 internal certificate consumers and an existing enterprise certificate authority.

OBJECTIVE

Maintain issuance, renewal, revocation/status publication and recovery as one accountable lifecycle.

SCOPE

Inventory, lifecycle engineering and a representative consumer pilot, retaining the approved CA and key custody.

MODEL BOUNDARY

Monitoring and lifecycle operating component for 100 synthetic consumers, with retained CA costs held equal.

A repeatable selection method

START WITH THE REQUIREMENT

Map the business workflow, data classification, integrations, scale, recovery objectives, operator skills and support hours. Treat eligibility, security and mandatory features as pass/fail gates before scoring price.

COMPARE SUITABLE CANDIDATES

For candidates that pass the gates, score functional fit 30%, operational maintainability 25%, integration and data portability 20%, three-year total cost 15%, and supplier/support resilience 10%. These are proposed weights, not completed vendor test results.

PROVE THE CHOICE

Run a representative pilot, negative tests and recovery exercise. Price hosting, retention, patching, engineering, support, training and exit. A lower license bill wins only when the complete solution meets the requirement.

Proposed selections and alternatives

Illustrative options for evaluation; selection does not represent a completed vendor test or an actual quote.

FIRST, PASS THE GATES

Map the business workflow, data classification, integrations, scale, recovery objectives, operator skills and support hours. Treat eligibility, security and mandatory features as pass/fail gates before scoring price.

PROPOSED SCORING WEIGHTS AFTER THE PASS/FAIL GATES

For candidates that pass the gates, score functional fit 30%, operational maintainability 25%, integration and data portability 20%, three-year total cost 15%, and supplier/support resilience 10%. These are proposed weights, not completed vendor test results.

PROPOSED DIRECTION	ALTERNATIVE TO TEST
Proposed: retain the approved CA and customer custody Use the established issuance authority when it fits the consumer and governance requirements; document templates, approval and backup.	A commercial managed PKI or lifecycle product may win on supported integrations, custody, assurance and operator capacity. A new CA is not inherently simpler.
PROPOSED DIRECTION	ALTERNATIVE TO TEST
Proposed: open-source monitoring of public trust artifacts Use a scoped Zabbix check or reviewed script for expiry, publication age and representative consumer behavior.	Expiry dashboards alone do not prove trust. Compare a commercial lifecycle product on enrollment automation, inventory completeness and independent consumer checks.
PROPOSED DIRECTION	ALTERNATIVE TO TEST
Proposed: reviewed automation and independent validation Version nonsecret procedures and require issuance/revocation authority; monitor signer, chain, freshness and required protocol behavior.	Keep keys, credentials and private inventory out of marketing and public Git. Open-source monitoring is not a replacement for protected key custody or valid enrollment approval.

PROOF BEFORE CHOICE

Run a representative pilot, negative tests and recovery exercise. Price hosting, retention, patching, engineering, support, training and exit. A lower license bill wins only when the complete solution meets the requirement.

Architecture flow and delivery path

The sequence below follows the supplied scenario flow and implementation stages.

Architecture flow

01**Authorized request -> suitable certificate**

The authority confirms identity, intended consumer, key custody and issuance permission.

02**Lifecycle -> publication**

Renewal and revocation update the agreed chain/status artifacts and accountable inventory.

03**Publication -> actual consumer**

A representative client checks protocol, hostname, chain, status and authorization rather than relying on HTTP success alone.

Implementation stages

01 Map trust and custody	Inventory authorities, consumers, publication paths, renewal owners and recovery dependencies.
02 Pilot checks	Validate a representative issued chain and status publication without disclosing private keys or customer configuration.
03 Stage lifecycle work	Introduce approved procedures and monitoring; retain prior public artifacts/configuration and documented recovery.
04 Rehearse and hand off	Test renewal, revoked/expired identity rejection and custody recovery with the actual consumer owners.

Acceptance and operating handoff

Acceptance evidence is scoped to the illustrative component described in this brief.

Acceptance checks

01

Acceptance check 1

A valid authorized certificate works with the actual scoped consumer.

02

Acceptance check 2

Expired, revoked or unauthorized trust fails according to the agreed policy.

03

Acceptance check 3

Published artifacts match the expected signer, validity, freshness and bytes.

04

Acceptance check 4

Recovery succeeds through the authorized custody procedure and restores consumer behavior.

Common handoff

01

Handoff 1

Customer owns approvals and business priorities; L8DT owns only the operating tasks and access authority in the signed schedule.

02

Handoff 2

Deliver versioned configuration, asset/data-flow registers, escalation and recovery runbooks, license obligations, known gaps and an acceptance record.

03

Handoff 3

Rehearse the operator workflow and restore before acceptance. Record owners, backup owners, training attendance, support hours and supplier escalation.

04

Handoff 4

Review coverage and evidence monthly; revisit capacity and access quarterly. Define export, credential removal and retention at termination.

36-month economics

Synthetic scenario inputs and calculated model outputs. These values are not a quote or realized savings.

Monthly assumptions and setup

Input	Illustrative commercial comparator	Illustrative L8DT model
One-time setup	\$6,500	\$9,000
License / month	\$550	\$0
Infrastructure / month	\$100	\$220
Service / month	\$700	\$900
Monthly cash total	\$1,350	\$1,120
Customer effort / month	6 hours	10 hours
Customer hourly value	\$65	\$65
Customer effort value / month	\$390	\$650

Calculated totals across 36 months

36-month total	Commercial comparator	L8DT model
Cash TCO (setup + monthly cash)	\$55,100	\$49,320
Customer-effort value	\$14,040	\$23,400
Economic TCO (cash + customer effort)	\$69,140	\$72,720

Modeled comparison outputs

NET CASH AVOIDANCE +\$5,780	COST AVOIDANCE 10.49%	CASH ROI 11.72%
ECONOMIC BENEFIT -\$3,580	PRETAX PROFIT DELTA: YEAR 1 / STEADY Y1 +\$260 steady +\$2,760	PAYBACK 11 months
L8DT EXTRA CUSTOMER TIME / MONTH 4 hours	SENSITIVITY ADD-ON / MONTH \$270	SENSITIVITY NET CASH AVOIDANCE -\$3,940

Model definitions, boundaries and references

Use the links and source notes for review. Public destination routes are targets; deployment was not verified for this package.

Definitions: cost avoidance = net cash avoidance / commercial 36-month cash TCO; cash ROI = net cash avoidance / proposed L8DT 36-month cash TCO. Economic benefit = commercial economic TCO minus L8DT economic TCO; economic TCO adds customer effort valued at the stated hourly input. Valued time is not payroll saving. Sensitivity applies the stated additional monthly L8DT operating cost for all 36 months.

REALIZED OUTCOMES

Realized ROI: NOT PROVIDED | Realized profit: NOT PROVIDED. These are not provided as customer results.

INTERPRETATION LIMIT

Illustrative scenario only. Proposed selections, input costs and modeled values are not actual customer results, completed vendor test results, or supplier quotes.

HYPOTHETICAL PROFIT-DELTA ASSUMPTION

Year-one pretax profit delta uses the modeled recurring cash difference less any incremental setup; steady-year delta uses 12 times the recurring cash difference. The model assumes costs are recognized as operating expenses with equal revenue and other costs. Capitalization, depreciation and tax treatment can differ.

Out of scope for this model

Retained CA/Windows/hardware costs, HSM or regulated custody changes, public certificate charges, new authority deployment, commercial support and taxes are excluded equally. Existing L8DT records are inspiration, not current proof.

WHAT TO PROVE AND PRICE

Run a representative pilot, negative tests and recovery exercise. Price hosting, retention, patching, engineering, support, training and exit. A lower license bill wins only when the complete solution meets the requirement.

Official project and product references

Zabbix monitoring capabilities

www.zabbix.com

Source data as of 2026-10-02.

Related L8DT destinations

Experience story /experience/certificate-lifecycle/	Solution detail /solutions/certificate-lifecycle/
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Website: <https://www.layer8defensetechnologies.com/>