Decide whether an edge device is needed

Sample discovery report 03 / Disconnected physical capture

Fictional customer example | Authored guide, not a generated assessment or validated architecture | Version 1.0

Discovery summary

Define the evidence and continuity requirements for measurements collected at a remote site before selecting hardware.

Workflow: A technician records measurements where connectivity is intermittent.

Claim: The claim to be supported, and the intended verifier, have not yet been defined.

Current tools: A local logger with untested export, buffering and recovery behavior.

Impact: Power or network loss could remove records or leave their origin and timing uncertain.

Declared position: Physical capture and disconnected operation are needed at a field boundary outside central network control.

Unknowns: Outage duration, acceptable loss, time accuracy, custody, threat model, operating environment and device capabilities remain unresolved.

What a useful result looks like

The chosen configuration meets agreed loss, outage and recovery thresholds under representative conditions and exposes residual uncertainty. Thresholds and results are intentionally not invented in this guide.

Read this example as a guide

Use the structure to prepare your own answers. Replace the fictional context with confirmed facts, keep unknowns explicit, and ask the proposed owners to review the recommendations. Do not copy example findings as evidence about your organization.

Actions and engagement path

1. Define the claim and verifier

Identify what a future reviewer must establish about each measurement and what the record cannot prove.

Suggested owner: Workflow owner | Why: Hardware cannot compensate for an undefined evidence claim.

2. Quantify the local boundary

Agree outage duration, acceptable loss, power conditions, physical access, time assumptions and reconnect behavior.

Suggested owner: Field operations owner | Why: These requirements determine whether local software or specialized hardware is necessary.

3. Compare and qualify options

Test the existing logger and a software-only option first. If a gap remains, evaluate a specific device SKU, firmware and configuration with power-loss and recovery cases.

Suggested owner: Architect and device engineering owner | Why: A device demonstration is not qualification for the actual field environment.

ETS relevance

Insufficient information. Evidence-gap and independent-verification needs are unresolved. Define those before proposing an ETS integration.

Edge-device relevance

Potentially relevant because a disconnected physical boundary is declared. No device is selected, and no hardware capability is assumed.

Alternatives to evaluate

Retain or configure the current logger; add local software buffering and controlled export; consider specialized hardware only if the defined boundary or resilience requirements remain unmet.

Architecture discussion

An architecture engagement should establish the boundary and pilot criteria. A device engagement can then qualify necessary capture, custody, key protection, updates, buffering and recovery capabilities for the selected configuration.

Bring to a discussion

A diagram of the physical capture and custody path / Expected outage and power-loss conditions / A sample record plus the intended verifier's questions

Scope and limits

All scenario inputs are illustrative declarations. No control, product, device or architecture has been independently verified. These examples do not assert compliance, certification, costs or quantified benefits. Manual-derived rules require approved source citations; none are asserted in these authored guides.