THE IDEA

What we know, how to check it, and what we still don’t know

A Konfirmu guide for families, teachers, decision-makers and professionals.



Two documents say that ten boxes arrived. Someone goes to the warehouse, counts the boxes on the floor and finds nine.

We can check that the documents match. To find out how many boxes arrived, we also need the count. What evidence would you ask the person who received them to show you?

THREE LEVELS OF EVIDENCE

What can we check?

A copy, a signature and a count answer different questions.

01 Do we have a trusted reference?

This could be the original file or its digital fingerprint, obtained through a trusted channel. Keep the version and the source of the reference too.

02 Does the copy contain the same data?

A hash is a digital fingerprint calculated from the bytes in a file. Checking a digital signature with a trusted key also lets you verify the link to the signer’s key.

03 Did the event in the document happen?

To establish what happened, you may need to count the boxes, check a measurement, consult an official record or ask someone qualified to review the evidence.

Three possible answers

“Match” when the copies agree. “Different” when they differ. “I don’t know yet” when a reference or another piece of evidence is missing.

You can check offline if your device already has the data, the reference and the tools. You can only recover a lost original if a copy exists.

Errors we learned to recognise

Six findings from the scientific note dated 25 November. Each test result refers to the version identified in the note.

WHAT WE FOUND	HOW TO CHECK	WHAT THIS DOES NOT ESTABLISH
F1 A 95% limit can cover less		
In this example, the upper limit calculated with a linear method covers 86.51% of values, although its nominal level is 95%.	Page 7 shows how to calculate coverage for the reciprocal of a normally distributed variable with mean 1 and standard deviation 0.3.	The result applies to this model and these limits. Other measurements require a fresh calculation.
F1 was recalculated for this edition. The team also repeated the calculation on 24 November.		
F2 A receipt and the size of a batch		
For some batches, the receipt produced by the version under study could not confirm how many items were present.	A review should record how many items arrived and what evidence links that count to the receipt.	This limits what the receipt establishes about the batch. The note reports no break in SHA-256.
The team repeated F2 on 24 November. The note recorded this issue as open in version 3.0.0.		
F3 When a distinction in the data disappears		
The stored representation lost a distinction present in the source data. The receipt could no longer establish it.	During a review, the team should be able to show that the record preserves every relevant distinction in the original.	The distinction was lost when the data were represented. The test does not demonstrate a cryptographic collision.
The team repeated F3 on 24 November. The note recorded this issue as open in version 3.0.0.		

FINDINGS / HOW TO CHECK / WHAT THIS DOES NOT ESTABLISH

When the system should stop

Six findings from the scientific note dated 25 November. Each test result refers to the version identified in the note.

WHAT WE FOUND	HOW TO CHECK	WHAT THIS DOES NOT ESTABLISH

F4 Two verifiers gave different answers

The internal review reports that one verifier detected 7 of 9 changes and the other detected all 9.	To assess a new version, compare its decisions with the expected ones and keep the test receipts.	Nine examples cannot establish how many changes would be detected in a different set of documents.

F4 was reported in the internal review on 24 November. The team did not rerun the test for the note.

F5 An “OK” when the rule required a stop

The team identified four situations in which the answer was “OK” although the rule required “VETO”.	With the proposed fix, 186 of 1,246 test cases stopped returning “OK”. None changed to “OK”.	The note described a proposed fix. Confirming its use in production requires evidence of the installed version and its tests.

F5 was reported on 24 November. On 25 November the note recorded that the fix was not yet public.

F6 A reading very close to the limit

In an example with limits of 2 and 8, rounding the reading to six decimal places gave a different decision from using higher precision.	A review should identify the precision used and the agreed rule for comparing the measurement with the limit.	The tolerance depends on the purpose and the applicable rule. This example does not set tolerances for other uses.

F6 was reported on 24 November. When the note was written, the reference rule was still under discussion.

HEALTH AND MEDICINE

Checking a health record

Three fictional situations in which someone can compare a record with a trusted reference.

01 A vaccination record

A comparison may reveal that a copy has been altered. Establishing that the vaccine was given requires evidence from the clinical encounter. Effectiveness requires its own evidence.

02 A laboratory result

You can check whether the report you received matches the one the laboratory stored. A healthcare professional should interpret an actual result.

03 A cold-chain record

You can compare a copy of the log with the reference. The sensor’s calibration and the actual storage conditions each need to be checked separately.

A sensor can record the wrong value

Suppose a sensor records 4 °C. If the sensor is faulty, the actual temperature may be different even when the copy matches the original log.

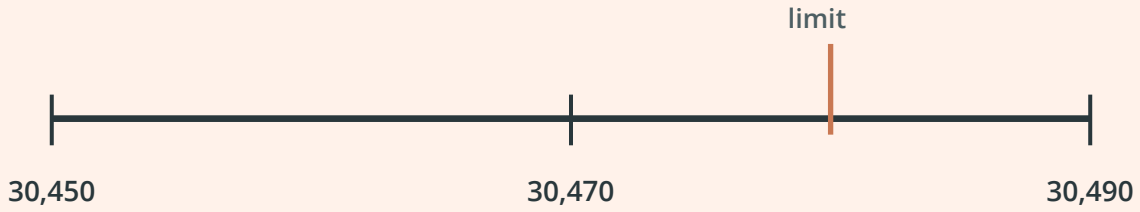
The scientific note describes Konfirmu as a research prototype. It is not a medical device and was not designed for diagnosis, treatment or decisions about individuals.

OPERATIONAL SAFETY AND VOTING

A valid receipt can say “stop”

A bench test with a fictional container and a hypothetical limit of 30,480 kg.

Weight reading of 30,470 ± 20 kg



Weight range, in kilograms

Try the weighing example

The range runs from 30,450 to 30,490 kg. The margin, calculated as limit minus weight, ranges from −10 to +30 kg. At the upper end, the weight exceeds the limit by 10 kg. The receipt can have a valid signature (VALID) while the rule calls for a stop (VETO).

What about voting?

Checking a signed set of minutes can reveal later changes. Voter access, the accuracy of the count and ballot secrecy each require their own evidence. A receipt that reveals a person’s choice can compromise secrecy.

Who can authorise the operation?

The signature lets you check the document. The people responsible decide whether to proceed, using the rules and data for the actual operation.

CHECKS ON YOUR DEVICE

How to check it yourself

With a trusted reference you can compare a file. You can also repeat the coverage calculation on page 3.

The note identifies Python engine version 3.0.0, commit 90b3968, dated 24 November 2026. The code is licensed under EUPL-1.2.

Official code repository · github.com/silvadvp-del/konfirmu-claim-protocol

SHA-256 of the Python engine, as reported in the note

`529098c652ee8234960d69383e308f60db6a5df8ea6bdae578b538eb806e80cf`

Place the release manifest and the corresponding files in one folder. Run the command for your system.

```
sha256sum -c SHA256SUMS.txt       # Linux
shasum -a 256 -c SHA256SUMS.txt   # macOS
```

The team reported 62 matching files, 247 self-checks and 10 rule sets tested on Linux with Python 3.13. These figures belong to that review.

Open the browser app · dpsindustrial.nl/konfirmu/app/

Select Compare files. Choose a reference file and a second copy, or enter the expected SHA-256. Select A4 · Compare. This checks the files; the weighing example is on page 6.

SHA-256 of the browser app's HTML file, checked on 26 November 2026

`0a468ec23401f5125ee1e5399ef536b6fba88beab94771e4df6b7910c9723717`

F1 · Repeat the calculation in Python

```
from statistics import NormalDist
X, Z = NormalDist(1, 0.3), NormalDist()
u = 1 + Z.inv_cdf(0.95) * 0.3
print(u, X.cdf(0) + 1 - X.cdf(1/u))
print(X.cdf(1/0.412) - X.cdf(1/1.588))
```

For Y = 1/X the upper limit is 1.493456088 and coverage is 86.51%. Negative X also satisfies this bound. The published, rounded two-sided limits of 0.412 and 1.588 give 89.14% coverage.

Coverage is the probability under this model. The note cites JCGM 100 and 101 on uncertainty propagation.

LIMITS AND FURTHER TESTS

What we still don’t know

Anyone receiving evidence can check it. What the evidence establishes depends on the reference and the test used.

Who ran the tests?

The note dated 25 November attributes the tests to the team and the AI systems it used. An independent review would identify the version, repeat the tests and record the results, including discrepancies.

What recognition is documented?

The review against the 295 requirements of ECSS-Q-ST-80C Rev.2 was a self-assessment. i-DEPOT filings 162925 and 164391 document what was deposited and when. Product quality requires a separate assessment.

What can a timestamp establish?

Chronolex lets readers check record integrity. The note says the free public timestamp service used offers no guaranteed legal effect. Evidence that the event occurred is still needed.

Found a discrepancy?

Record the version, the expected result and what you observed. Send the details to admin@dpsindustrial.nl.

Scan or tap to open

Official DPS website
dpsindustrial.nl

12-sector kit
ZIP · 275 843 B

Unzip the kit and open 09-Shipping under Exemplos. Compare 01-original.txt with 02-copia.txt in the app: the shipment changes from 24 to 29 boxes.

Primary source · Scientific note of 25 November 2026

Konfirmu_Scientific_Note.pdf · 88 212 B · SHA-256

`884fde70000fa68dccdb4b6527da7a1bce8a7737b3f44c03340f182ae6100f88`

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