Protocol Transparency Rating

Tori (trUSD)

Independent Proof of Solvency, tori.accountable.capital

GRADE	**BBB** · composite 2.79
CAPTURED	**2026-11-13 15:24 UTC**
DEPTH	**Dashboard Deep-Audit (Protocol Transparency Rating v3.1)**
METHODOLOGY	**Protocol Transparency Rating v3, 2026-07-20 (RockawayX Research)**

A Protocol Transparency Rating grade rates disclosure, not safety. It measures how much of what a risk professional needs is actually on the page: not whether the assets are safe, and not whether the displayed numbers are true. A dashboard can be fully backed and score poorly because it proves none of it; it can score well and still hold assets that later fail. This is not a credit rating.

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Summary

Composite **2.79**, band A, published **BBB**. No item moved this week. One critical omission (item 3) caps the grade at BBB; no other gate binds. The letter still rests on one judgment, whether the accountant letters count as equivalent evidence for the institution names (Rule 1). The evidence behind the 6 November reading did not change, so this pass holds it.

Captured 2026-11-13 15:24:11 to 15:24:42 UTC from the full rendered page after scroll, with the browser timezone set to UTC. The page served the 15:16:02 feed cycle. The absence protocol ran alongside. Every FAQ entry was opened one at a time, every tooltip in the breakdown was read by mouse hover after expanding each class and checked against the probe's page text, and every address row was clicked with `window.open` intercepted.

What changed on the page since 6 November:

Change since 2026-11-06	Items	Effect
A fourth HT Digital letter, dated 6 November, is linked and marked LATEST. The Proof of Reserves Reports statuses now read "As of 6 Nov 2026". The letter was signed on 11 November, and apart from dates and figures its text is the 30 October letter word for word	13, Rule 1	Item 13 unchanged at 3.5. Rule 1 condition 2 is still not met
A new row, "AUSD - Morpho (unallocated)", USD 37,602: Tori's share of idle cash in the Monad vault. Checked against the chain, it is correct	1, 3	No change. The label does not say that both of the vault's markets take Tori tokens
USD 3.41M supplied to the Ethereum USDC/cbBTC market on 10 and 11 November. The on-chain leg rose from 9.51% to 13.40% of backing	10, 17	No change. 99.99% of the leg is at published addresses, and 94% could leave on demand (75% on 6 November)
The breakdown table now sums exactly to the Strategy Allocation	21	No change. Sub-rows are still undated, now one day old

At capture	
Composite	**2.79, band A, published BBB**
Gates	`k` = 1 (item 3), `j` = 0, `m` = 0, `v` = 0, no kill-switch minus
Total Protocol Reserves	USD 77,460,193
Total Supply (USD)	USD 77,370,370, **reproduced on-chain exactly**
Collateral Ratio	100.12%, Reserve Fund USD 89,823 (**0.12% of supply**, 0.20% on 2026-11-06)
Custody	Custodian banks 77.49%, investment banks 9.12%, on-chain 13.40%
On-chain leg at published addresses	**USD 10.37M of USD 10.38M displayed, 99.99%**
Reserve assets lent against Tori's own tokens	**USD 3.41M, 4.40% of reserves**, flagged (USD 3.44M, 4.64% on 2026-11-06)
Address links	17 of 17 rows resolve, 15 unique addresses, each to its own Etherscan page
Confidence	High on the liability, on control and on the on-chain leg; Medium on the 86.60% off-chain

What holds the grade at BBB is the same single ground. For 86.60% of backing, institutions are named only as classes: "regulated custodian banks" and "regulated investment banks". Under v3.1 that is a critical omission unless Rule 1 applies. The page states a reason and now links four dated, signed letters, but the letters attest amounts by asset category and say nothing about the institutions. This report does not accept them as equivalent evidence. Accepted, the grade is **A** (see How fragile this grade is).

The Reserve Fund fell again. It went from USD 149,896 to USD 89,823. The week's reward mint, USD 128,092, was larger than what reserves gained above deposits, USD 68,019. Lending against Tori's own tokens is now 37.9 times the Reserve Fund, against 22.9 times on 6 November, though the lending itself fell slightly. Neither is a disclosure gap in itself, and neither moves the grade.

How to read this grade

The grade measures **disclosure**: how much of what a risk professional needs is actually on the page. It is not a view on whether the assets are safe or whether the displayed numbers are true.

Under v3.1, twenty-five items are grouped into nine weighted dimensions. Each is scored 0 to 4 on evidence tier:

Score	Evidence tier
4	Reproduced or on-chain-verifiable
3	Shown in detail or independently attested
2	Headline only
1	Ambiguous
0	Absent

The **composite** is the weight-normalized sum of the dimension means, also 0 to 4. Item 19 (credit quality) is not applicable to a book with less than 5% loan-type exposure; it then drops out, and the remaining weights are renormalized over 94.

Composite	Band	What a reader can do with the page	What is typically still absent
3.60 to 4.00	AAA	Assess the position from the page alone	Nothing decision-critical
3.20 to 3.60	AA	Assess it, with one gap to close by asking	One notable item, most often per-leg true freshness
2.70 to 3.20	A	Assess it after closing a small number of gaps	Two or three items, commonly feed control and credit performance
2.20 to 2.70	BBB	Work from the page; **the adequacy threshold**	One decision-critical field, or several soft gaps
1.70 to 2.20	BB	Size the position, but not the risk inside it	A decision-critical field: usually pricing source or redemption terms
1.20 to 1.70	B	Read the headline figures and little else	Composition detail, custody granularity, any verification path
below 1.20	C	Not enough to assess anything	Almost everything beneath the headline

An item is **omitted** when it scores 1 or below. Which omissions are critical is fixed by a list, not judged by the rater. The gates then apply to the band, in order, to produce the **published grade**:

	Trigger	Effect
Critical-omission ceiling	`k`, omissions on the critical list (items 1, 3, 6, 7, 8, 14, 16, 19, 20, and 10 with 11 as one)	One caps at BBB, two or more at B
Medium-impact ceiling	`j`, omissions on the medium list (items 2, 5, 13, 15, 17, 18, 22, 23, 24, 25)	Caps at AA
Single-vendor cap	`v`, set when items 10, 11 and 13 are all absent	Caps at BBB
Mismatch downgrade	`m`, set when a figure on the page contradicts a primary source and is unresolved	**One band lower, marked ▼**
Kill-switch flag	Item 22 absent with no independent verification path	A trailing (minus)

A grade is only valid with its capture date, and describes the page as it stood at that moment.

What this dashboard does not show

Seven items score 2 or below. Ranked by what each costs the composite:

	Not shown	What a reader therefore cannot answer	Composite points lost
8	Custody location per leg	Which institutions hold the 77.49% at "regulated custodian banks" and the 9.12% at "regulated investment banks"	0.128
3	Counterparty identity per leg	Which banks and investment banks hold 86.60% of backing, and how many there are	0.089
15	First-loss or junior buffer	What absorbs a loss beyond the USD 89,823 Reserve Fund, 0.12% of supply	0.085
25	Mandate and allocation constraints	Which assets, venues and markets the operator may allocate to, with what caps, and who must sign to change them	0.080
4	Concentration	Whether the largest single counterparty is 5% of the book or 50%	0.074
5	Underlying position volatility	How far the money-market and cash books can move. A net equity delta is shown for the 7.77% delta-neutral leg only, and no net currency position for the local-currency money-market book	0.074
17	Maturity and lock-up	How far below NAV each leg would realise at its stated time to cash. Horizons are given, deviation bounds are not	0.071

Negative-Space Map

Legend: ● shown, ◐ partial, ○ absent. Classification: critical, medium, mismatch, soft.

Critical: item 3, counterparty identity per leg (score 1)

- ◐ **Off-chain institutions named as classes.** 77.49% of backing is held at "regulated custodian banks" and 9.12% at "regulated investment banks", with no name, no count and no concentration figure. Rubric 4.2 scores a class-

level name at 1, a critical omission unless Rule 1 applies.

- ● **Reflexive allocation, flagged.** The rows read "USDC - Morpho (Tori token collateral)" and "AUSD - Morpho (Tori token collateral)". Every position at the published addresses was checked (L1): the labels are complete, and the cbBTC label is correct. The new "AUSD - Morpho (unallocated)" row is Tori's share of idle cash in the Monad vault. That label is accurate. It does not say that the vault's only two markets both take Tori tokens, which is where that cash can be allocated. The page does not name the markets or the vault, which is an item 10 gap, not an item 3 cap.

Rule 1 decides the letter. The three conditions, for the off-chain institution names:

Condition	Met?	Evidence
1. The page states the reason for withholding	Yes	"Tori does not disclose institution names to protect operational security"
2. Equivalent evidence covers the withheld field specifically	**No, on this rater's reading, held from 6 November**	The 6 November letter, like the three before it, attests balances by asset category. It does not name, count or characterise the institutions, and it takes the accounts' designation "from management". It says a future engagement "will aim to review the controls, security and ownership of assets". The words "institution", "custodian", "segregated", "qualified" and "commingled" do not appear in it
3. The evidence is checkable	Yes for the letter; no for what the page says beyond it	Four dated letters at a weekly cadence, each with a signature whose integrity verifies. The page's "Segregated custody: Yes, as of 6 Nov 2026" and "Full access to the underlying books and records" are not statements a reader can find in any letter

Apart from dates, figures and signing references, the 6 November letter is the 30 October letter word for word, as that one was the 16 and 23 October letters. What the page says about the institutions is the issuer's statement; what the accountant signed is an amount per asset category. Condition 2 is a judgment on which raters may differ, and the report gives the letter on both readings in the next section.

No medium-impact omission

`j` = 0. Items 5 and 25, at 1.5, are the nearest to the boundary.

No mismatch

`m` = 0. Every displayed figure tested reconciles to its primary source. Several descriptions sit badly with the page's own figures or with the documents it cites. None contradicts a displayed figure, and each carries a reading under which it holds, so each goes to the issuer as a question. All were open on 6 November:

- **"Same day" against the Term and Overnight tooltips.** The page defines time to cash as "the slowest settlement period within a class" and labels Money Markets "Same day". The tooltips describe USD 2,548,179 of that class as "available on the next business day" and USD 14,232,124 as "fixed-term" (average maturity 21.4 days in the payload, not rendered; 29.4 days on 6 November). A reading in which these placements can be converted early is consistent, but the page does not say so, or at what cost.
- **"Segregated custody: Yes" against the letter it links.** See the Rule 1 table.
- **"Two layers of assurance".** The letter says an assurance engagement will follow "in the future"; the platform footer says Proof of Solvency "is not an audit, assurance opinion, guarantee".
- **"Off-chain balances are as of the date of the latest report".** The 6 November letter gives its off-chain balances as of 5 November.

- **On-chain scope.** The On-chain Liquidity tooltip says "held on-chain on Ethereum and Base", while sub-row tooltips put 31.98% on Monad. The wallet table is headed "verifiable Ethereum-mainnet".

Material

- **The buffer shrank against the reflexive legs.** USD 3,406,603 is lent against Tori's own tokens: 4.40% of reserves and 37.9 times the Reserve Fund. The amount fell by USD 32,282 in the week; the multiple rose because the Reserve Fund fell. The page flags the legs and does not state a limit on them (item 25).
- **Item 17: "Same day" now holds for 94% of the on-chain leg.** At the retrieval blocks USD 9.77M of the USD 10.38M On-chain Liquidity class could leave on demand (75% on 6 November). The rise comes from the USD 3.41M placed in the USDC/cbBTC market, whose free liquidity is USD 54.3M. On Monad, free liquidity in the vault's two markets plus its idle cash cover USD 2.72M of Tori's AUSD 3.32M position, 82% (46% on 6 November).
- **Item 1: one hedge is described but not sized.** Derivatives Margin is USD 7,779,872, 129% of the only derivative the page sizes (USD 6,016,050 of short single-stock futures). The tooltip states that the margin also secures "USD futures for currency exposure". Those futures have no notional or memo row.

Soft

- **Item 21.** The composition sub-rows are as of 2026-11-12 in the payload, one day before capture, and render undated.
  - The breakdown table now totals the Strategy Allocation exactly, USD 77,460,193 (USD 74,074,868 against USD 74,070,676 on 6 November).
  - The live payload splits the two hedged classes differently from the table: delta-neutral USD 6,732,047 and cash and equivalents USD 7,163,087, where the table shows USD 6,015,084 and USD 7,881,631. The two splits agree on the total.
  - The pricing-source dates are retrieval stamps. The three off-chain class values were identical to the cent across the 15:16 and 15:31 cycles.
- **Item 18.** Pending redemptions are stated as zero. The Asset Manager connection lists an "In Transit" category in the payload, with no rendered row and no value.
- **Item 15.** The Reserve Fund is USD 89,823, 0.12% of supply: 0.77% on 2026-09-30, 0.57% on 2026-10-13, 0.41% on 2026-10-23, 0.40% on 2026-10-30 and 0.20% on 2026-11-06. No subordination is described, and the page does not explain the fall (see Quantified decisive risk).
- **Item 25.** No mandate is published.
  - The Protocol Control text states that API operations are "restricted to configured markets, contracts and initiators" and that "unmatched transactions are blocked". An allowlist therefore exists, but its content is not shown.
  - The custody card refers to "Tori's mandate" without stating it.
  - USD 3.41M went into the cbBTC market in three supplies on 10 and 11 November, with no statement on the page of what bounds the size of a Morpho leg.
- **Item 13.** The HT Digital letters are reviews ("we have had sight of the following collateral"), not assurance engagements. The letter says an ISAE 3000 engagement will follow "in the future". The 6 November letter was signed five days after its date; the 30 October letter was signed the same day.

How fragile this grade is

Item 3, a critical-list item, sits at 1. All letters below are from `tools/score.py`:

Item 3	Composite	K	Published
0.5	2.78	1	BBB
1 (as scored)	**2.79**	**1**	**BBB**
1.5	2.81	0	**A**
1, with Rule 1 accepted	2.79	0 (item 3 counted as medium)	**A**

A half-point on item 3, or the Rule 1 judgment alone, moves the letter one band. The composite is 0.093 above the A floor: with Rule 1 accepted, a half-point lower on item 6 or item 7 (2.75) still publishes A. On the low side the grade is 0.59 clear of the BBB floor.

One further judgment is recorded. Were the "Same day" label treated as contradicted by the page's own tooltips rather than as a question, `m` = 1 and the calculator gives **BB** ▼. This report does not apply it, under the standing rule that a label with a consistent reading is scored as a gap and put to the issuer.

Item-level scores

#	Item	Score	Evidence
1	Composition by instrument	3	Four classes, each decomposed, with a short futures book and net equity delta. Morpho rows carry their collateral class, and idle vault cash has its own row. The USD futures the margin secures have no notional or memo row
2	Asset-category mix	3.5	Four classes with value, percent, sub-rows and time to cash
3	Counterparty identity per leg	1	Off-chain institutions as classes only, for 86.60% of backing. Reflexive legs flagged, so the rubric 4.2 cap does not apply; on-chain legs name Morpho and the collateral class, not the market or vault. Rule 1 not applied
4	Concentration	1.5	Class and sub-row percentages only; no counterparty count, top-1 or top-10 share
5	Underlying position volatility	1.5	Net equity delta USD -965 against a USD 6.02M long book, for the delta-neutral leg only; no net currency position for the hedged local-currency book
6	Ratio and definition	3.5	Formula stated, NAV methodology stated, maximum theoretical daily NAV movement stated
7	Pricing / oracle source per leg	2.5	Three named source classes dated with their retrieval time, plus the Payment Service provider statement date; no valuation date for the off-chain marks, no mapping of source to leg, no update authority per leg
8	Custody location per leg	2	The weakest material leg governs: 77.49% at custodian banks, given only as a class. The on-chain leg is at address granularity for 99.99%
9	Custody tier, source-directness	3	Seven named connections. The Asset Manager API (86.48% of reserves) is retrieved direct from source. Signed accountant letters; a dated MPC-provider policy confirmation
10	On-chain self-verify links	3.5	17 of 17 rows resolve, each to its own address. At the retrieval blocks the published addresses hold 99.99% of the displayed on-chain leg, the Monad leg included. Markets and vaults are not named, links are to Etherscan only, and 32% of the leg is on Monad
11	Cryptographic verification	3	Merkle root `6rBse7urTGnYU7h7vGzeZxLnq3VUu9RSHumW9X72KLbe`, timestamp 2026.11.13 15:18:58, signature validated 2026.11.13 15:24:14; enclave attestation and ZK proofs described

#	Item	Score	Evidence
12	Acquisition method and issuer credibility	3	Seven connections with type, exposure, interval and last-updated; private channels marked
13	Independent attestor	3.5	HT Digital: four signed letters dated 16, 23 and 30 October and 6 November, linked; liability figures reproduce on-chain. Review scope, not assurance; designation taken from management
14	Liabilities (supply)	4	Total Supply USD 77,370,370; `totalSupply()` 77,370,370.1856 on two providers
15	First-loss / junior buffer	2	Reserve Fund USD 89,823, 0.12% of supply; no tranche or subordination
16	Redemption terms and gating	3.5	Mint, stake, unstake and redeem with timing; 7-day cooldown; NAV per share 1.038843; no redemption queue; a 2 to 3% on-chain instant-redemption target
17	Maturity and lock-up	2	Time to cash per class, weighted average maturity 7.6 days (dated 2026-11-12), market depth and cover per class; no deviation bound from NAV for any leg (v3.1 grid cap)
18	Funds in transit and pending redemptions	2.5	Pending redemptions stated as zero; funds in transit not addressed
19	Credit quality and defaults	1	Not applicable under v3.1: loan-type exposure 0% of reserves (see Gates applied). The 1 in the score file enters no calculation
20	Cadence, timestamp, history	3.5	Retrieval interval, most-recent retrieval, seven connection stamps, long history on reserves, ratio, APY and rewards
21	Per-leg true freshness	3	Connections and pricing sources dated to the minute as retrieval times; composition sub-rows undated at one day old
22	Feed control and kill-switch	3	FAQ answer, opened and read: Accountable can halt the external server, Tori can disconnect its node, and the dashboard freezes on its last snapshot. Self-reported
23	Key custody and signing policy	3.5	Ten roles with quorum content. Owner / Admin 3-of-5 Safe reproduces on-chain. Fordefi policy for nine vaults dated 2026-10-26, with 2-of-2 MPC signing keys and API rules stated. A static snapshot, eighteen days old
24	Deployment security	3	Audits and monitoring linked; "owner-level changes behind timelocks" stated without the timelock's address or delay. On chain, upgrades route only through a 24-hour timelock
25	Mandate and allocation constraints	1.5	No mandate published. The page states that API operations are restricted to "configured markets, contracts and initiators" without saying which; strategy descriptions describe holdings rather than bound them

Dimension scores

Dim	Dimension	Weight	Items	Mean	Contribution
D1	Holdings and Composition	14	3, 3.5, 1, 1.5, 1.5	2.100	0.3128
D2	Valuation	16	3.5, 2.5	3.000	0.5106
D3	Custody	12	2, 3	2.500	0.3191
D4	Source Integrity and Verification	16	3.5, 3, 3, 3.5	3.250	0.5532
D5	Liability and Loss-absorption	8	4, 2	3.000	0.2553
D6	Liquidity	10	3.5, 2, 2.5	2.667	0.2837

Dim	Dimension	Weight	Items	Mean	Contribution
D7	Credit and Counterparty	n/a	19 not applicable	n/a	n/a
D8	Freshness	6	3.5, 3	3.250	0.2074
D9	Control and Operational Security	12	3, 3.5, 3, 1.5	2.750	0.3511
	Composite (weights renormalized over 94)	94			**2.7933**

Gates applied

Gate	Input	Effect
Band from composite	`C` = 2.7933	A
1 Critical-omission ceiling	`k` = 1: item 3	Ceiling BBB, **binding**
1b Medium-impact ceiling	`j` = 0	None
2 Single-vendor cap	`v` = 0 (items 10, 11 and 13 all present)	No cap
3 Mismatch downgrade	`m` = 0. No displayed figure is contradicted; the description conflicts are listed in the Negative-Space Map	None
4 Kill-switch flag	Item 22 at 3	No minus
Grade		**BBB**

Item 19 is not applicable because loan-type exposure is under 5% of reserves:

Leg	Share	Where it is scored
Overnight reverse repo	47.00%	Items 3, 4 and 8
Bank deposits	21.66%	Items 3, 4 and 8
Morpho supply positions, overcollateralised at 86% to 94.5% LLTV, and idle vault cash	12.16%	Items 1, 3 and 5
Derivatives margin and cash at bank	10.18%	Items 3 and 8
Listed equities, hedged	7.77%	Not a credit exposure
Plain stablecoins and ETH	1.24%	Items 1 and 8

Loan-type exposure is therefore 0% of reserves. At most it is 0.14%, if all of the letter's "cash, receivables and payables" line were receivables. The Morpho legs grew from 8.10% to 12.16%; addendum 4.4 scores overcollateralised DeFi lending under items 1, 3 and 5, not item 19.

Frontier set

`F` is named and counted, **n = 6**: the four followed dashboards (Huma, Tori, Upshift, Yuzu) and Coinshift and Noon, graded outside the followed set. Huma and Tori carry v3.1 grades captured 2026-11-13; the other four carry their v3 grades of 2026-10-23 until their first v3.1 pass. A v3.1 composite includes item 25 and, where item 19 is not applicable, is taken over 94, so composites under the two methods are not strictly comparable and no set mean is given.

Dashboard	Composite	Published	Method	Captured
Huma PST	2.97	A	v3.1	2026-11-13 15:23
Tori trUSD	**2.79**	**BBB**	**v3.1**	**2026-11-13 15:24**
Upshift earnAUSD (Monad)	2.00	B ▼	v3	2026-10-23 07:21
Noon USN	1.79	BB	v3	2026-10-23 07:21
Yuzu yzUSD	1.78	BB	v3	2026-10-23 07:21
Coinshift iUSPC	1.12	C ▼	v3	2026-10-23 07:21

Tori trUSD is second of six by composite and by letter, 0.18 below Huma PST. It is the only member whose letter is held below its own band by the critical-omission ceiling.

Quick-win path

Action	Item	Composite effect
Name the institutions, or give a counterparty count with top-1 and top-10 shares	3: 1 to 3, 4: 1.5 to 3	**+0.104, and the letter moves to A**
Publish the mandate: eligible assets, venues and markets, per-venue caps including the Tori-token markets, and who signs a change	25: 1.5 to 3	+0.048
Publish a volatility or drawdown series for the money-market and cash books, with the net currency position	5: 1.5 to 3	+0.045
Describe the loss waterfall beneath the Reserve Fund	15: 2 to 3	+0.043
Give a deviation-from-NAV bound at each leg's time to cash, and render the term-deposit maturity	17: 2 to 3	+0.035
Name the custodian institutions, or the custody structure per class	8: 2 to 2.5	+0.032
Name each Morpho market and vault, and link Monad positions to a Monad explorer	10: 3.5 to 4	+0.021
Date the composition sub-rows	21: 3 to 3.5	+0.016
Have a third party confirm the halt arrangement	22: 3 to 3.5	+0.016
Show the notional of the USD futures the derivatives margin secures	1: 3 to 3.5	+0.015

Each row was run through `tools/score.py`; the full list together reaches 3.17, A.

The first row is the direct route to A. A narrower route needs no name to be published: have the weekly letter itself state the number of institutions, their regulated status and the segregation of the accounts, so that Rule 1 can apply to the names. The composite does not change on that route; `k` falls to 0 and the letter moves to A. Without either route, every other row together reaches 3.06 and the grade stays BBB.

No line of the 6 November list was taken this week.

Verification overlay (does NOT change the grade)

L1 Reproduction ledger

Blocks and providers:

- **Ethereum:** block 26,406,872 (15:14:59 UTC), the last block before the page's 15:15:00 to 15:15:03 UTC retrievals, via `eth.drpc.org`; supply confirmed on `1rpc.io`; event logs via `rpc.mevblocker.io` in 5,000-block windows, with a non-empty control in each window.
- **Monad:** block 121,918,999 (15:15:00 UTC) via `rpc.monad.xyz`.
- **Base:** block 56,962,623 via `mainnet.base.org`.
- **Other sources:** Morpho positions via the Morpho API on Ethereum, Base and Monad, cross-checked on-chain against Morpho Blue `position()` and `market()`; holders via Blockscout, re-read with `balanceOf` at the retrieval block.

Claim on page	Method	Result	Reconciles
Total Supply USD 77,370,370	`totalSupply()` on trUSD `0xd0580192e98ea6ceb9c7b6191ed2e27560911697`, two providers	77,370,370.1856	**Yes, exact**
HT Digital letter of 6 November, 74.021m trUSD at block 26,355,975	`totalSupply()` at that block, 13:00:47 UTC	74,020,779.79	**Yes**
Collateral Ratio 100.12%	Feed reserves over supply	77,460,193.25 / 77,370,370.19 = 1.00116	Yes
Reserve Fund USD 89,823	Feed `net`	89,823.07	Yes
USDC USD 740,286 (Ethereum)	`balanceOf` at all 15 published addresses	739,668.83 tokens (Custodian 514,429; DeFi Operator 124,796; Minting Contract 100,444)	**Yes**, at market price
USDT USD 207,561	Same	207,734.70 tokens	Yes, at market price
AUSD USD 12,164	Same	12,176.82 tokens	Yes, at market price
ETH USD 425	Native balances times Chainlink ETH/USD 1,941.00	0.2704 ETH, USD 525	USD 100 over, immaterial
USDC - Morpho (other collateral: cbBTC) USD 5,971,388	Morpho Blue `position()` and `market()`	Custodian USD 5,967,064 in USDC / cbBTC (86% LLTV)	**Yes**, within 0.07%
USDC - Morpho (Tori token collateral) USD 126,331	Same, four markets	DeFi Operator USD 126,252: strUSD 90,888; etrUSD 5,047; PT-strUSD 5,049; PT-trUSD 25,267	**Yes**, within 0.06%; all four collaterals are Tori tokens
Monad AUSD - Morpho (Tori token collateral) USD 3,280,272	Vault `balanceOf`, `convertToAssets` and idle balance, plus Morpho Blue `position()` for the DeFi Operator	Vault position AUSD 2,319,298, less Tori's share of idle cash (AUSD 37,643), is AUSD 2,281,655; plus AUSD 1,002,036 supplied directly: AUSD 3,283,691	**Yes**, within 0.10%; both markets take Tori tokens

Claim on page	Method	Result	Reconciles
Monad AUSD - Morpho (unallocated) USD 37,602	Vault idle AUSD times Tori's share of vault shares	AUSD 100,967 times 37.28% = AUSD 37,643	**Yes**
Base USD 5	Native balance of the Custodian on Base	0.00248 ETH, USD 4.81; zero in the cbBTC market	Yes
On-chain leg USD 10,376,133	Sum	USD 10,374,760 at published addresses, **99.99%**	**Yes**
Address links	All 17 rows clicked with `window.open` intercepted	17 rows, 15 unique addresses, each opening its own Etherscan page	Yes
Connection shares	Feed `dataSources`	DeFi Protocols 12.16%, equal to the Morpho rows; Blockchain Wallets 1.24%, equal to the plain rows	Yes
Owner / Admin 3/5 SAFE QUORUM	`getThreshold()`, `getOwners()`, `nonce()` on `0x0C6Bbfd2d5666d44bf28580eDEec0263692C8316`	Threshold 3, five signers, nonce 46. Two executions since 6 November (see L4); no owner or threshold event	**Yes**
Upgrade authority	EIP-1967 slots, `Upgraded` events, timelock events	Implementations unchanged; no timelock operation since 6 November	**Yes**
Money Markets, Cash & Equivalents, Delta-Neutral	Off-chain, attested	Not reproducible from public sources	n/a

The upgrade-authority check, in detail:

- **Timelock.** Upgrades of trUSD and strUSD require `TIMELOCK_ADMIN_ROLE`, held only by the timelock `0xa952453e39f77108ee37c1b92de593f1c59a6ef4`, whose minimum delay is still 86,400 seconds.
- **Roles and operations.** No role was granted or revoked on trUSD, strUSD or the Minting Contract since block 26,353,951, and no operation was scheduled, executed or cancelled on the timelock. The 6 November simulation of `upgradeToAndCall` was not repeated, since nothing it depends on changed.
- **Implementations.** Unchanged: trUSD `0xb1d1...f631`, strUSD `0x6561...977a`.

The Monad position.

- **Vault.** "SharpByte AUSD Tori Ecosystem" (`0x790e4f829fe865d432c4Ea83B8B15F8871415B6c`) holds AUSD 6,220,987 (7,300,815 on 6 November). Tori's shares are 37.28% of it (31.7%). It allocates AUSD 6,019,597 to AUSD/strUSD at 86% LLTV and AUSD 100,024 to AUSD/PT-strUSD-4FEB2027 at 91.5% LLTV, and holds AUSD 100,967 idle.
- **Market.** AUSD/strUSD on Monad: supply AUSD 12,799,552, borrowed AUSD 10,233,716, 80.0% utilised (82.4% on 6 November), free liquidity AUSD 2,565,836. Through the vault and directly, Tori supplies 25.4% of the market (38.8%).
- **Flows.** Tori's Monad positions show no material flow in the week. On Ethereum the Custodian supplied USDC 1,116,083 (10 November 14:14 UTC), USDC 1,100,000 (11 November 10:02 UTC) and USDC 1,192,920 (11 November 11:21 UTC) to USDC/cbBTC. Neither address withdrew from a Morpho market on Ethereum in the window.

Item 16 probe (v3.1, not scored).

- **trUSD holders.** The largest trUSD address is the strUSD staking contract, at 89.23% of supply. The top 10 addresses hold 99.58%, and all but one are contracts.
- **strUSD holders.** A lockbox holds 31.79% (21.77% on 6 November), Morpho Blue 19.34% (borrowers' collateral) and the largest externally owned account 16.29%, about USD 11.25M at NAV or 14.5% of trUSD supply (17.3%). The top 10 hold 95.73%.
- **The buffer.** The liquid on-chain buffer at the retrieval block is USD 6.93M (8.95% of supply): USD 0.96M of plain stablecoins and ETH plus the cbBTC-market supply, which that market's liquidity covers in full. It excludes the Tori-token legs. The largest single holder is 1.6 times that buffer (3.6 times on 6 November).
- An address is not an entity. Unstaking strUSD carries the 7-day cooldown.

L2 Attestation and custody trace

Seven connections:

- the Asset Manager API (verification level 4, 15-minute interval), 86.48% of reserves;
- the DeFi Protocols and Blockchain Wallets connections (level 6), 12.16% and 1.24%;
- a Payment Service Provider's secondary account statement (level 2, periodic), 0.13%. Its statement is still dated 2026-09-25, 49 days before capture;
- CEX and Payment Rail API connections, each at 0%.

The MPC policy confirmation is unchanged on the page: Fordefi, 2026-10-26 17:04 UTC, nine vaults.

The HT Digital letters.

- **Cadence.** Dated 16, 23 and 30 October and 6 November, each a week apart. The 6 November letter is linked from `stablecoin.accountable.capital`, with a version stamp of 12 November; the three earlier links are unchanged. No 13 November letter was on the page at capture.
- **Basis.** The letters state that HT Digital was "requested to review the collateral" and "had sight of" it. On-chain holdings are read at the stated time, 13:00 UTC on 6 November. Off-chain balances are taken as of 5 November, one day before the letter's date.
- **Figures.** The 6 November letter gives six asset lines, a total of USD 74.172M and a collateral ratio of 100.20%. Its supply reproduces on-chain at the stated block (L1).
- **What the letters rely on.** They say the assets are held by Tori (BVI) Ltd "in accounts designated for the trUSD reserves", which HT Digital "understand[s] from management". They state that the backing on "the Tori transparency dashboard (https://app.tori.finance/transparency)" matches. That URL is not the page graded here.
- **Signature.** The 6 November letter carries a CAdES signature whose integrity verifies over the signed byte range. The certificate names the signing platform, not the accountant, and the chain was not validated. The signing time and the platform's timestamp both read 11 November 10:00:18 UTC; the timestamp imprint was not re-checked this week.
- **Signing lag.** The 6 November letter was signed five days after its date. The 30 October letter was signed the same day, the 23 October letter three days after and the 16 October letter seven. The PDF creator field still reads "tori-dashboard".

The Attestations block's other entry, a RockawayX wordmark with "Real-time access to the raw, unfiltered data at source, with no Tori system in between", names the publisher of this rating and is not credited under item 13. The page's rating card reads "Last rating Oct 30, 2026", while the ratings page it links shows the 6 November pass; it is not credited under any item.

L3 Adversarial check

The claim tested hardest was the new "unallocated" row, because a new label beside a flagged leg is where a reflexive allocation could hide. It holds. Tori's vault shares are 37.28% of the vault, and 37.28% of the vault's AUSD 100,967 idle cash is AUSD 37,643, against USD 37,602 shown. The rest of Tori's vault position sits in the vault's two markets, both against Tori tokens, and is counted in the flagged row. The label is accurate for the cash as it stands. It does not tell a reader that the vault's only markets take Tori tokens.

The second claim tested was "Segregated custody: Yes, as of 6 Nov 2026", because it sits closest to Rule 1. Against the sources it is attributed to:

- The 6 November letter says only that HT Digital understands "from management" that the accounts are designated for the reserves, and leaves "controls, security and ownership of assets" to a future engagement.
- The platform footer says verification "does not independently establish the accuracy, completeness, legal characterization, ownership, valuation, or enforceability of the underlying information or assets except to the extent expressly covered by the applicable verification methodology". The page does not say that segregation is so covered.
- 12.16% of reserves are not in the protocol's contracts but lent through third-party Morpho markets.

The status may well be true. Neither source a reader is pointed to establishes it.

The third was "Same day" (see Negative-Space Map, No mismatch, and Material).

L4 Liveness and control

Control.

- Ten privileged roles are published with quorum content, and each one tested matches the chain.
- The Owner / Admin Safe reproduces at 3-of-5 with unchanged signers. Its nonce moved from 44 to 46, through two batched executions:
  - 10 November 18:26 UTC: rate-limit and finality settings on two CCIP token pools (LockReleaseTokenPool `0x6823...d463` and `0x63aa...66b9`).
  - 12 November 13:16 UTC: deployment of an implementation and two proxies, "Locked Pendle YT strUSD 25FEB2027" (`0xEc5D...7401`) and "Locked Pendle YT trUSD 25FEB2027" (`0x8925...6bF9`), each with zero supply, with the 24-hour timelock set as their admin. Neither is shown on the page, and neither holds reserves.
- The Safe remains the only proposer on the 24-hour timelock that alone can upgrade trUSD and strUSD. The Proposal Executor and Proposal Canceller, both 2-of-4 vaults, hold those roles on it.
- strUSD's `FULL_RESTRICTED_STAKER_ROLE`, granted to three externally owned accounts on 2026-10-29 (block 26,296,471), is unchanged: no grant or revocation since, and the three addresses hold no strUSD at this pass's block. The page lists a Gatekeeper and a Whitelister among its roles, but does not describe the power to restrict staked balances.

Feed. The FAQ entry on halting is unchanged; it is the issuer's statement, and a halt cannot be tested from outside. A frozen page would still carry its "Most Recent Retrieval" stamp, so a reader can detect a halt by reading the date.

Freshness, polled.

- The capture read the 15:16:02 cycle. A read at 15:44 returned the 15:31:01 cycle, with the Asset Manager stamp at 15:30:02.
- NAV per share re-marked from 1.038843 to 1.038846.
- The three off-chain class values were identical to the cent across cycles: money market instruments USD 53,188,925.91, delta-neutral USD 6,732,047.23, FX collateral USD 7,062,908.75. Total reserves moved only with

the on-chain legs and bank cash.

- The connection stamp therefore records a retrieval, not a revaluation, as on 23 and 30 October and 6 November.

No gate was contemplated on freshness.

Quantified decisive risk

Loss-to-impairment. The Reserve Fund is USD 89,823 against USD 77,370,370 of supply, **0.12% of the book**. No junior tranche sits beneath it.

Leg	Share	Loss on the leg that exhausts the buffer
Money Markets	68.66%	0.17%
On-chain Liquidity	13.40%	0.87%
Cash & Equivalents	10.18%	1.1%
Delta-Neutral Equity Arbitrage	7.77%	1.5%
Of which lent against Tori's own tokens	4.40%	2.6%

Money Markets is the leg where the smallest loss reaches par. The reflexive allocation is smaller, but its loss is correlated with the event it would need to cover: the borrowers' collateral is the token the reserves back.

The week's move in the Reserve Fund, from public figures:

	USD
Reserve Fund, 2026-11-06 06:16	149,896
trUSD minted to the StakingRewardsDistributor (`0xa0C4...D375`) on 11 November, no reserves received	-128,092
Reserves change not explained by deposits: reserves rose USD 3,389,517 against USD 3,321,498 minted to other addresses	+68,019
Reserve Fund, 2026-11-13 15:16	**89,823**

The middle line assumes the other mints were paid in at par, as the page's "Deposit USDC, receive trUSD 1:1" states [UNVERIFIED]. No trUSD was burned in the window. The week's fall, USD 60,073, is the reward mint less the reserves' gain. The page does not explain it, and the ratio definition's "accrued but undistributed rewards" does not separate the two lines.

Deltas since the last pass

Prior pass: `gradings/2026-11-06-v3.1/dashboard-audit-tori-trusd-2026-11-06.md`, composite 2.79, BBB under v3.1.

	2026-11-06	2026-11-13	Note
Composite	**2.79**	**2.79**	**No item moved**
Published grade	**BBB**	**BBB**	**By ceiling on both dates**
Item 3	1, on one ground	1, on the same ground	Institutions still classes; Rule 1 reading held

	2026-11-06	2026-11-13	Note
Total Reserves	USD 74,070,676	USD 77,460,193	+4.6%
Total Supply	USD 73,920,780	USD 77,370,370	+4.7%
Reserve Fund	USD 149,896, 0.20%	USD 89,823, 0.12%	
Custody: banks, investment banks, on-chain	80.83%, 9.66%, 9.51%	77.49%, 9.12%, 13.40%	
Lent against Tori's own tokens	USD 3.44M, 4.64%	USD 3.41M, 4.40%	Both flagged
Lent against Tori's own tokens, times the Reserve Fund	22.9	37.9	
USDC/cbBTC market supply	USD 2.56M	USD 5.97M	Three supplies on 10 and 11 November
On-chain leg at published addresses	99.96%	99.99%	
On-chain leg withdrawable on demand	75%	94%	
Monad position withdrawable on demand	46%	82%	
Largest strUSD account against the liquid buffer	3.6 times	1.6 times	
Derivatives Margin against sized futures	130%	129%	
Composition sub-rows	As of 2026-11-04, undated	As of 2026-11-12, undated	Table now sums to the total
Weighted average maturity	9 days	7.6 days	Term-deposit average maturity in payload 29.4 to 21.4 days
NAV per share	1.036862	1.038843	
HT Digital letters	Three, latest signed the same day	Four, latest signed five days after its date	Wording unchanged
Safe nonce	44	46	CCIP pool settings; two zero-supply wrappers deployed

Last week's re-grade triggers:

Trigger	Outcome
A weekly letter covering the institutions, named institutions, or a count with shares	Not taken. The 6 November letter is unchanged in wording
The 6 November letter: wording, a lapse, or a move to ISAE 3000	**Published**, signed 11 November. No lapse; ISAE 3000 is still described as future
A published mandate, including any limit on the Tori-token markets	Not taken
Deviation-from-NAV bounds, and a time-to-cash label that matches the tooltips	Not taken. Labels and tooltips unchanged

Trigger	Outcome
The Tori-token legs	USD 3.41M, down USD 32K; flag kept at market level, and idle vault cash given its own row
The Reserve Fund	Fell again, to 0.12%
A statement of what `FULL_RESTRICTED_STAKER_ROLE` does	Not taken. The role is unchanged on-chain

Re-grade triggers

- A weekly letter that states the number of institutions, their regulated status and the segregation of the accounts, or named institutions, or a counterparty count with top-1 and top-10 shares: items 3, 4 and 8, and Rule 1. **This is what moves the letter to A.**
- The 13 November HT Digital letter: whether its wording changed, its signing lag, and a lapse or a move to the announced ISAE 3000 engagement: item 13.
- A published mandate with caps and a change process, including any limit on the Tori-token markets and on the vault cash that can be allocated to them: item 25.
- Deviation-from-NAV bounds per leg, and a time-to-cash label that matches the Term and Overnight tooltips: item 17.
- The Tori-token legs against the Reserve Fund, now 37.9 times.
- The Reserve Fund, which has fallen at every pass since 2026-09-30 (0.77%, 0.57%, 0.41%, 0.40%, 0.20%, 0.12% of supply).
- A statement of what `FULL_RESTRICTED_STAKER_ROLE` does and who it has been applied to: item 24.
- Any use in the reserves of the two wrappers deployed on 12 November.

Sources

- **Rendered dashboard**, `https://tori.accountable.capital`, captured 2026-11-13 15:24:11 to 15:24:42 UTC. Browser timezone UTC, full page after scroll, 14,600 characters. Artifacts: `captures/tori-trusd-2026-11-13-{tabs.json,network.json,overview.png,overview-expanded.png,meta.json}`.
- **Absence protocol**, `captures/tori-trusd-2026-11-13-absence-probe.json`: monotonic expansion over two passes, `textContent`, every title, aria-label and alt value, and a row and button sweep with `window.open` intercepted.
- **FAQ, tooltips and address rows**, `captures/tori-trusd-2026-11-13-faq-tooltips.json`, 15:39 to 15:40 UTC: each FAQ entry opened individually, every "About" tooltip hovered after expanding each class, and all 17 address rows clicked.
- **Freshness reads**, `captures/tori-trusd-2026-11-13-feed-t1.json` (the 15:16:02 cycle) and `captures/tori-trusd-2026-11-13-feed-t2.json` (the 15:31:01 cycle).
- **Backend feed** `https://tori.accountable.capital:8443/dashboard`, including `attestation_reports`, `policy_attestation`, `dataSources`, `underlying_exposure`, `nested_split`, `maturity` and `liquidity`.
- **HT Digital proof-of-reserves letters** dated 2026-10-16, 2026-10-23, 2026-10-30 and 2026-11-06, linked from the page's Attestations block and Proof of Reserves Reports table (`tori.accountable.capital/reports/HTDS_Tori_BVI_PoR_Letter_<date>.pdf`, and for 6 November `stablecoin.accountable.capital/file/HTDS_Tori_BVI_PoR_Letter_2026-11-06.pdf`). Their text, metadata and signature checks are summarised in `captures/tori-trusd-2026-11-13-overlay.json`.

- **Chain reads.** Ethereum, Monad, Base, Morpho and holder reads as listed in L1, each with its block height, archived in `captures/tori-trusd-2026-11-13-overlay.json`.
- **Accountable's ratings page** linked from the rating card, text archived in `captures/tori-trusd-2026-11-13-rating-page.txt`.
- **Prior pass and captures**, `gradings/2026-11-06-v3.1/`.
- **Methodology.** Protocol Transparency Rating v3, `spec/protocol-transparency-rating-v3-2026-07-20.md` and the source PDF, as amended by `spec/protocol-transparency-rating-v3.1-addendum-2026-10-26.md`.

Standing disclaimer

A Protocol Transparency Rating grade rates disclosure, not safety. It measures how much of what a risk professional needs is actually on the page: not whether the assets are safe, and not whether the displayed numbers are true. A dashboard can be fully backed and score poorly because it proves none of it; it can score well and still hold assets that later fail. This is not a credit rating.