

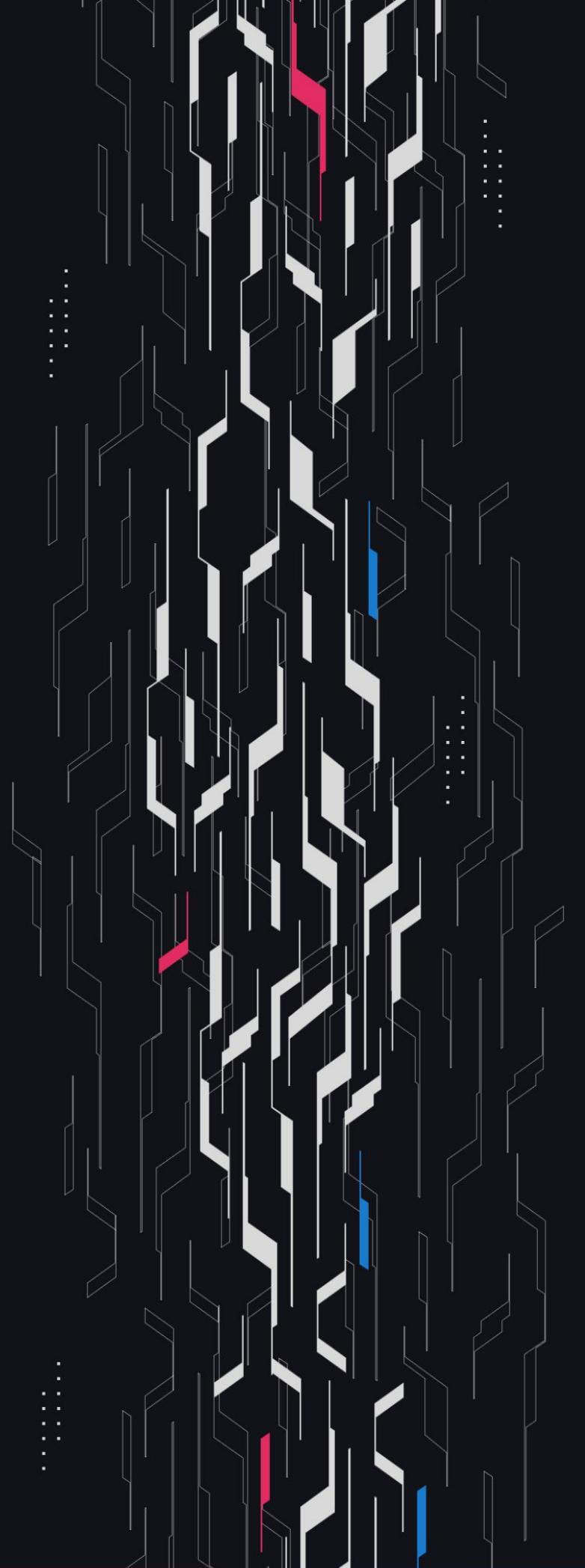
 **GUARDIAN**

Jupiter

Jup-Stablecoin

Security Assessment

December 25th, 2025



Summary

Audit Firm Guardian

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Client Firm Jupiter

Final Report Date December 25, 2025

Audit Summary

Jupiter engaged Guardian to review the security of their Jup-Stablecoin Codebase. From the 17th of November to the 24th of November, a team of 4 auditors reviewed the source code in scope. All findings have been recorded in the following report.

Confidence Ranking

Given the minimal High and Critical issues detected during the main review, Guardian assigns a Confidence Ranking of 5 to the protocol. Guardian advises the protocol to consider periodic review with future changes. For detailed understanding of the Guardian Confidence Ranking, please see the rubric on the following page.

Note: Fixes to the findings uncovered in the remediation review have not been reviewed by Guardian. Guardian recommends the client either perform an amended follow-up review period to focus on the fixes to remediations findings or seek a follow-up audit from another team.

 Verify the authenticity of this report on Guardian's GitHub: <https://github.com/guardianaudits>

Guardian Confidence Ranking

Confidence Ranking	Definition and Recommendation	Risk Profile
5: Very High Confidence	<p>Codebase is mature, clean, and secure. No High or Critical vulnerabilities were found. Follows modern best practices with high test coverage and thoughtful design.</p> <p>Recommendation: Code is highly secure at time of audit. Low risk of latent critical issues.</p>	0 High/Critical findings and few Low/Medium severity findings.
4: High Confidence	<p>Code is clean, well-structured, and adheres to best practices. Only 1 Significant issue was uncovered per week. Design patterns are sound, and test coverage is strong.</p> <p>Recommendation: Suitable for deployment after remediations; consider periodic review with changes.</p>	0-1 High/Critical findings per engagement week and little to no Medium severity issues. Varied Low severity findings.
3: Moderate Confidence	<p>Medium-severity and occasional High-severity issues found. Code is functional, but there are concerning areas (e.g., weak modularity, risky patterns). No critical design flaws, though some patterns could lead to issues in edge cases.</p> <p>Recommendation: Address issues thoroughly and consider a targeted follow-up audit depending on code changes.</p>	1-2 High/Critical findings per engagement week.
2: Low Confidence	<p>Code shows frequent emergence of Critical/High vulnerabilities. Audit revealed recurring anti-patterns, weak test coverage, or unclear logic. These characteristics suggest a high likelihood of latent issues.</p> <p>Recommendation: Post-audit development and a second audit cycle are strongly advised.</p>	2-4 High/Critical findings per engagement week. Or additional High/Critical findings uncovered in remediation review which have not been resolved and confirmed by Guardian.
1: Very Low Confidence	<p>Code has systemic issues. Multiple High/Critical findings ($\geq 5/\text{week}$), poor security posture, and design flaws that introduce compounding risks. Safety cannot be assured.</p> <p>Recommendation: Halt deployment and seek a comprehensive re-audit after substantial refactoring.</p>	≥ 5 High/Critical findings and overall systemic flaws.

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Project Overview

Project Summary

Project Name	Jupiter
Language	Solidity
Codebase	https://github.com/jup-ag/jup-stablecoin
Commit(s)	Main Review commit: a7fbb3be291c83124854f3f00e5c8f4c587aa1b7 Remediation Review commit: da2cd2b62d81b493f145fd0f81338a6cb5a973ed

Audit Summary

Delivery Date	December 25, 2025
Audit Methodology	Static Analysis, Manual Review, Test Suite, Contract Fuzzing

Vulnerability Summary

Vulnerability Level	Total	Pending	Declined	Acknowledged	Partially Resolved	Resolved
● Critical	0	0	0	0	0	0
● High	0	0	0	0	0	0
● Medium	0	0	0	0	0	0
● Low	9	0	0	1	0	8
● Info	9	0	0	2	0	7

Audit Scope & Methodology

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/jup-stablecoin-main/programs/jup-stable/src/state/vault.rs
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TOTALS
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Audit Scope & Methodology

Vulnerability Classifications

Severity	Impact: High	Impact: Medium	Impact: Low
Likelihood: High	● Critical	● High	● Medium
Likelihood: Medium	● High	● Medium	● Low
Likelihood: Low	● Medium	● Low	● Low

Impact

- High** Significant loss of assets in the protocol, significant harm to a group of users, or a core functionality of the protocol is disrupted.
- Medium** A small amount of funds can be lost or ancillary functionality of the protocol is affected. The user or protocol may experience reduced or delayed receipt of intended funds.
- Low** Can lead to any unexpected behavior with some of the protocol's functionalities that is notable but does not meet the criteria for a higher severity.

Likelihood

- High** The attack is possible with reasonable assumptions that mimic on-chain conditions, and the cost of the attack is relatively low compared to the amount gained or the disruption to the protocol.
- Medium** An attack vector that is only possible in uncommon cases or requires a large amount of capital to exercise relative to the amount gained or the disruption to the protocol.
- Low** Unlikely to ever occur in production.

Audit Scope & Methodology

Methodology

Guardian is the ultimate standard for Smart Contract security. An engagement with Guardian entails the following:

- Two competing teams of Guardian security researchers performing an independent review.
- A dedicated fuzzing engineer to construct a comprehensive stateful fuzzing suite for the project.
- An engagement lead security researcher coordinating the 2 teams, performing their own analysis, relaying findings to the client, and orchestrating the testing/verification efforts.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Ensuring contract logic meets the specifications and intentions of the client.
- Cross-referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- Thorough line-by-line manual review of the entire codebase by industry experts.
Comprehensive written tests as a part of a code coverage testing suite.
- Contract fuzzing for increased attack resilience.

Findings & Resolutions

ID	Title	Category	Severity	Status
L-01	Slot-timestamp Mismatch Breaks Price Fetching	DoS	● Low	Resolved
L-02	SetStatus(Disabled) Requires A Valid Oracle	Unexpected Behavior	● Low	Resolved
L-03	Last Admin Removal Allow Permanent Protocol Halt	Validation	● Low	Resolved
L-04	Lack Of PegManager Access Check	Access Control	● Low	Resolved
L-05	Restricted Custodian Deposits/Withdrawals	Logical Error	● Low	Resolved
L-06	Majority Of Oracles Instead Of All	Oracle	● Low	Acknowledged
L-07	Switchboard Max_staleness Uses Seconds Not Slots	Oracle	● Low	Resolved
I-01	Needlessly Public OraclePrice Functions	Best Practices	● Info	Resolved
I-02	Enabled Vault Can Be Left With Zero Oracles	Unexpected Behavior	● Info	Resolved
I-03	From_pyth_v2() Can DOS Minting And Redeeming	DoS	● Info	Resolved
I-04	Missing Decimal Check At Pool Creation	Validation	● Info	Resolved
I-05	Admins Can't Clear Roles Once Set	Informational	● Info	Resolved
I-06	Vault.bump Field Is Never Initialized	Best Practices	● Info	Resolved

Findings & Resolutions

ID	Title	Category	Severity	Status
I-07	Unsafe Downcasting	Math	● Info	Acknowledged

L-01 | Slot-timestamp Mismatch Breaks Price Fetching

Category	Severity	Location	Status
DoS	● Low	oracle.rs: 52	Resolved

Description

There is an integration bug in how `PullFeedAccountData get_value` is used. The code calls `get_value` with `clock.unix_timestamp`.

```
let price = price_feed.get_value(clock.unix_timestamp as u64, staleness_threshold, 1, true)
```

But the external library expects that argument to be `clock_slot` not a Unix timestamp.

https://github.com/switchboard-xyz/solana-sdk/blob/dd1e768c5fd2bc99955c60629a2137dc08c4e81d/src/on_demand/accounts/pull_feed.rs#L369

`s.slot` values are in slot units around ~381M on Solana mainnet, while `clock.unix_timestamp` is seconds since Unix epoch ~1.7B. We have this check in the library.

It filters submissions via `s.slot >= clock_slot - max_staleness`. Due to the bug, the filter check becomes

```
s.slot >= (unix_timestamp_seconds) - (max_staleness)
```

The code sends `max_staleness = 300` as default, so it will equal $\sim 381_{194\}_{828} \geq \sim 1_{763\}_{589\}_{000} - 300$. That will always be false, no submission ever passes the filter, `submissions.len() == 0`. So the later `submissions.len() < min_samples` will always revert with "NotEnoughSamples". On every user mint / redeem call, `parse_oracles` is being called.

Which `collect()` all the prices from Pyth, Doves and SwitchboardOnDemand oracles, save them into `Result<Vec<OraclePrice>>`. If every oracle returns `Ok(price)`, the code takes minimum oracle price of that vector and proceeds to the `min()` with the 1:1 path in mint/redeem. But if any oracle returned `Err()` for any reason the whole mint/redeem tx reverts.

When we `collect()` an iterator of `Result<T, E>`, we get `Result<Vec<T>, E>`. This works as building a vector of all the `Ok` values, but if you see a single `Err`, stop and return that `Err` instead. All users mint / redeem operations on vaults which have a SwitchboardOnDemand oracle will revert.

After DoS, a vault manager can set the Switchboard oracle to None via `update_oracle`. But this will still cause blocking the usage of Switchboard until the code is mitigated, since the current integration is broken.

Recommendation

Use `clock.slot` instead of `clock.unix_timestamp` in `get_value`.

Resolution

Jupiter Team: Resolved.

L-02 | SetStatus(Disabled) Requires A Valid Oracle

Category	Severity	Location	Status
Unexpected Behavior	● Low	vault.rs: 174	Resolved

Description

In `manage_vault` handler in the `SetStatus` action, the code always checks whether the vault has at least one oracle configured (at least one oracle entry is non-empty) and reverts with a `NoValidOracle` error if all oracle slots are empty.

This check runs regardless of the target status, so it also blocks `SetStatus(Disabled)` on a vault with no valid oracles. By contrast, the dedicated `Disable` action (requiring the `VaultDisabler` role) does not perform this oracle check and can successfully disable such a vault.

This creates an inconsistency in how disabling works - a `VaultManager` using `SetStatus(Disabled)` may be unable to disable a misconfigured vault that a `VaultDisabler` can disable.

As a result, an operator with only this `VaultManager` role cannot call `SetStatus(Disabled)` on a vault that currently has no valid oracles, even though disabling such a vault might be a reasonable emergency action, leading to confusing expectations about which role is responsible for safely disabling vaults.

Recommendation

Only require a valid oracle when enabling the vault. In `manage_vault` instruction allow `SetStatus(Disabled)` action to proceed regardless of oracle state.

Resolution

Jupiter Team: Resolved.

L-03 | Last Admin Removal Allow Permanent Protocol Halt

Category	Severity	Location	Status
Validation	● Low	config.rs: 63-69	Resolved

Description

In `Config::remove_admin`. There is no check that at least one admin remains, or prevents an admin from removing themselves.

`psm::manage_config` lets an admin pause the protocol and then remove all admins including themselves, leaving `is_paused == true` and zero admins.

Since `manage_config` requires an existing admin to run, there is no on chain way to unpause after this, and the protocol (including all redemptions) is permanently blocked.

That's an info issue, but add a check as precaution

Recommendation

Disallow removing the last admin.

```
require!(self.num_admins() > 1, PSmError::NotAllowed);
```

Resolution

Jupiter Team: Resolved.

L-04 | Lack Of PegManager Access Check

Category	Severity	Location	Status
Access Control	● Low	admin.rs: 86	Resolved

Description

The protocol defines a dedicated PegManager role, intended to be used in `ConfigManagementAction::SetPegPriceUSD`.

There is a missed `operator.is(OperatorRole::PegManager)?;` in the code.

`SetPegPriceUSD` is guarded by Admin, and the intention is that it has its dedicated role, as confirmed in the meeting call.

Currently, the protocol cannot delegate peg operations to a specialized multisig without giving it full admin privileges

Recommendation

Implement the PegManager access check.

Resolution

Jupiter Team: Resolved.

L-05 | Restricted Custodian Deposits/Withdrawals

Category	Severity	Location	Status
Logical Error	● Low	custodian.rs: 33	Resolved

Description

The program's data model separates the token program for:

- the LP mint (stored in `Config.token_program`),
- the vault/collateral mint (stored in `Vault.token_program`).

Both Mint and Redeem instructions respect this split, check if `config.token_program == lp_token_program.key()` and `vault.token_program == vault_token_program.key()` and uses `lp_token_program` for LP and `vault_token_program` for collateral operations.

However, the Deposit and Withdraw instructions enforce that both the LP token program and the vault token program are the same as the single `token_program` account passed in.

These instructions only move collateral and never touch the LP mint, so the `config.token_program` equality is irrelevant and conflicts with the design that allows LP and collateral to live on different token program IDs (e.g. LP on Token-2022, collateral on SPL).

Consequently, if LP and collateral use different token program IDs (which Mint and Redeem allow), Deposit and Withdraw will revert with `InvalidTokenProgram` error.

Recommendation

Remove the `config.token_program == token_program.key()` constraint from both Deposit and Withdraw so they only validate and use `vault.token_program`, allowing LP and collateral to use different token program IDs.

Optionally, if the LP and collateral are always intended to share the same token program, enforce that consistently.

Resolution

Jupiter Team: Resolved.

L-06 | Majority Of Oracles Instead Of All

Category	Severity	Location	Status
Oracle	● Low	parse_oracles()	Acknowledged

Description

As described in the `SwitchboardOnDemand` issue, the code `collect()` all the prices from `Pyth`, `Doves`, and `SwitchboardOnDemand` oracles, and saves them into `Result<Vec<OraclePrice>>`.

If every oracle returns `Ok(price)`, the code takes the minimum oracle price of that vector and proceeds. But if any oracle returns `Err()` for any reason, the whole mint/redeem tx reverts.

Despite that the 3 oracles will be working correctly, to avoid temporary DoS in some cases, we could check if at least 2 succeed

Recommendation

For example ethena does

```
if (validOracleCount < minNumberOfOracles) {  
// revert  
}
```

After filtering, they count `validOracleCount`. If `validOracleCount < minNumberOfOracles`, they revert.

Important: If you implemented this change make sure to not mask the other critical errors, the code enforce that all configured oracle accounts are present and match the vault config (owner + pubkey) only treat genuine soft failures (stale price, internal oracle error) as skippable, and only if we have reached the `minNumberOfOracles`.

Resolution

Jupiter Team: Acknowledged.

L-07 | Switchboard Max_staleness Uses Seconds Not Slots

Category	Severity	Location	Status
Oracle	● Low	oracle.rs: 52	Resolved

Description

Other than `clock.unix_timestamp`, the code also passes the threshold differently. The `stalesness_threshold` is defined and used as a time in seconds for Pyth and Doves, but it is passed directly as `max_staleness` into `PullFeedAccountData::get_value` for Switchboard:

`get_value` is implemented to treat `max_staleness` as a slot count, not seconds.

This becomes ~300 seconds for Pyth/Doves but ~300 slots (~2–3 minutes) for Switchboard, leading to inconsistent freshness behavior across oracles.

This can reject Switchboard prices more aggressively than configured, increasing the chance of `NotEnoughSamples` for Switchboard while Pyth/Doves still pass

Recommendation

Keep `stalesness_threshold` as a seconds parameter for Pyth/Doves, but convert it to slots before calling Switchboard

Resolution

Jupiter Team: Resolved.

I-01 | Needlessly Public OraclePrice Functions

Category	Severity	Location	Status
Best Practices	● Info	oracle.rs: 16	Resolved

Description

I'd say `from_pyth_v2()` and its counterparts in `oracle.rs` should be private instead of public because they have minimal internal validation (looking at the use of `AccountsInfo` with no manual validation in particular) and are meant to only be used by `parse_oracles()` (which does indeed validate account owners, etc).

This impacts nothing right now because they aren't used anywhere else but in `parse_oracles()` but changing this would prevent somebody mistakenly using them directly in the future.

Recommendation

Make `from_pyth_v2()` and its counterparts private instead of public.

Resolution

Jupiter Team: Resolved.

I-02 | Enabled Vault Can Be Left With Zero Oracles

Category	Severity	Location	Status
Unexpected Behavior	● Info	vault.rs: 178	Resolved

Description

The protocol correctly blocks enabling a vault that has no valid oracle (for the SetStatus(Enabled) action it requires at least one non-empty oracle). However, once a vault is Enabled, an operator can call UpdateOracle and set each oracle slot to None (EmptyOracle) without any guard.

This allows the vault to remain Enabled while having zero configured oracles. In that state, user instructions (mint/redeem) will fail at oracle validation, resulting in an enabled vault that unexpectedly cannot process user flows, confusing integrations and operators.

Recommendation

Consider rejecting updates that would remove the last oracle while vault is enabled or set the vault's status to Disabled during that case.

Resolution

Jupiter Team: Resolved.

I-03 | From_pyth_v2() Can DOS Minting And Redeeming

Category	Severity	Location	Status
DoS	● Info	oracle.rs: 17-40	Resolved

Description

Look at the `(price_u64 - price.conf).into()`, snippet of the `from_pyth_v2()` function. Pyth only guarantees `conf` to be "positive when present" but not smaller than the price.

Albeit highly unlikely, it is possible that stablecoins become distressed (TerraLuna, USDC/DAI depeg after SVG). Therefore a scenario where `conf` is bigger or equal to `price` is also unlikely but possible.

In the case where this underflows, because you've set `profile.release` to have `overflow-checks = true`, this will panic. It's not caught within `parse_oracles()` and `parse_oracles()` is always called with the `? operator`. This means the panic will propagate and revert the transaction even if all of the other oracles returned valid prices, i.e.: a DoS in `mint()` and `redeem()`.

What's more, this line can also return `0` if `price == conf`. Returning `0` is unexpected and something that is clearly not wanted (since we've checked that the price is not `0` or negative in this function and also for Switchboard we use `only_positive=true`).

There is a layer of defense for this situation: the vault min-max limits, but there's no guarantee that they will be sensible (even though the defaults are sensible at \$0.5-\$1, these can be eventually set to anything).

Now, `parse_oracles()` returns the smallest given price, so it will return the `0` if it's provided by `from_pyth_v2()` even if there are other valid prices from the other oracles. And if the vault min-max limits don't catch it, this would trickle down to `compute_mint_amount` and make it return `0` as `mint_amount` which would make `require!(mint_amount > 0, JupStableError::ZeroAmount);` throw.

On the redeeming side, an oracle price of `0` would trickle down to cause a "division by 0" panic in `calculate_redeem_amount`.

Recommendation

It would be better to check something like `price.checked_sub(conf) <= 0` rather than the `price.price <= 0` check we have and the `price_u64 - price.conf` we do `checked_sub` returns `None` if there's an overflow instead of panicking.

Resolution

Jupiter Team: Resolved.

I-04 | Missing Decimal Check At Pool Creation

Category	Severity	Location	Status
Validation	● Info	pool.rs: 71	Resolved

Description

Because of `require!(diff <= 19, PSmError::MathOverflow);` `normalize_amount` always assumes that

```
|decimals - target_decimals| <= 19
```

But that is never enforced anywhere when the pool is created

The program allows a pool to be created between any two mints, including ones whose decimals differ by 20+.

And when a user later calls `redeem`, `normalize_amount` will see `diff > 19` and revert with `PSmError::MathOverflow` before any transfers happen.

So a pool can be configured and look valid on-chain, admins can `supply` and `withdraw`, but no user will ever be able to `redeem` if the decimals gap is > 19.

Recommendation

Enforce the same require check at pool creation for consistency

Resolution

Jupiter Team: Resolved.

I-05 | Admins Can't Clear Roles Once Set

Category	Severity	Location	Status
Informational	● Info	operator.rs: 78	Resolved

Description

The implementation for Operator

(<https://github.com/GuardianOrg/jup-stablecoin-team1-1762878643100/blob/a7fbb3be291c83124854f3f00e5c8f4c587aa1b7/programs/jup-stable/src/state/operator.rs#L75>)

contains both `set_role` and `clear_role`.

The `set_role` function is use in `manage_operator`

(<https://github.com/GuardianOrg/jup-stablecoin-team1-1762878643100/blob/a7fbb3be291c83124854f3f00e5c8f4c587aa1b7/programs/jup-stable/src/instructions/operator.rs#L78>),

but `clear_role` is used nowhere (not within `manage_operator` nor another function).

This means the admin cannot clear a role once given.

P.S.: If a role owner becomes malevolent you can still disable them from being an operator, so this is not the worst bug in the world.

Recommendation

Implement `clear_role()` as part of `manage_role()` similar to how it was done for `set_role()` or potentially add another program callable function similar to `delete_benefactor()`.

Resolution

Jupiter Team: Resolved.

I-06 | Vault.bump Field Is Never Initialized

Category	Severity	Location	Status
Best Practices	● Info	vault.rs: 96	Resolved

Description

The Vault account includes a `bump` field, but `create_vault` does not set it and it remains at its default value 0. That makes the field effectively unused and can cause maintenance issues if later code assumes it contains the correct bump for vault PDA derivations.

Recommendation

Either initialize `vault.bump` in `create_vault` using `ctx.bumps.vault` or remove the field entirely.

Resolution

Jupiter Team: Resolved.

I-07 | Unsafe Downcasting

Category	Severity	Location	Status
Math	● Info	state/benefactor.rs	Acknowledged

Description

The following functions perform downcasting from u128 to u64 using the as keyword, which omits arithmetic overflow checks:

```
pub fn calculate_mint_fee(&self, amount: u64) -> u64 {  
    (amount as u128 * self.mint_fee_rate as u128 / 10000) as u64 + 1  
}  
  
pub fn calculate_redeem_fee(&self, amount: u64) -> u64 {  
    (amount as u128 * self.redeem_fee_rate as u128 / 10000) as u64 + 1  
}
```

Recommendation

It is recommended to use `try_into()` instead of the as keyword.

Resolution

Jupiter Team: Acknowledged.

Remediation Findings & Resolutions

ID	Title	Category	Severity	Status
L-01	Missing Token_program In Custodian ATA	Compatibility	● Low	Resolved
L-02	Redeem Blocks Exits During Depegs	Oracle	● Low	Resolved
I-01	Custody Separation Allows Redemption Siphon	Informational	● Info	Acknowledged
I-02	Unused Mint Parameter In PDA Binding	Informational	● Info	Resolved

L-01 | Missing Token_program In Custodian ATA

Category	Severity	Location	Status
Compatibility	● Low	user.rs: 59C6-61C23	Resolved

Description

The vault can be configured to use either SPL Token or Token-2022 mints, but in the Mint and Withdraw contexts, `custodian_token_account` is constrained using only `associated_token::authority` and `associated_token::mint` and does not specify `associated_token::token_program`, so Anchor derives and validates the ATA using the default SPL Token program.

This produces a different address than the Token-2022 ATA and would make mints and privileged withdrawals fail for Token-2022 vaults.

Recommendation

Include `associated_token::token_program` in the `custodian_token_account` constraints so ATA derivation works for both SPL Token and Token-2022.

Resolution

Jupiter Team: The issue was resolved in commit [57c2a28](#).

L-02 | Redeem Blocks Exits During Depogs

Category	Severity	Location	Status
Oracle	● Low	vault.rs: 189	Resolved

Description

In the Oracle Price Validation logic during Redemptions, There is an important difference between the solana and the ethena implementation when the collateral asset depegs (crashes or it's price become low)

In the EVM version, the oracle price validation logic is split based on the operation type, Mint vs Redeem.

But in the solana version, the `redeem` instruction calls `vault.validate_oracle_price`, which enforces both minimum and maximum price bounds regardless of the operation context.

If the collateral asset depegs and price drops below `min_oracle_price_usd`, the `validate_oracle_price` function will fail. This blocks the `redeem` instruction.

So during a market crash or depeg event, when users most need to redeem their stablecoins for collateral, users are locked in and cannot exit until the admin manually lowers the `min_oracle_price_usd`.

If the project intends to use only low volatility stablecoins like USDT and USDC, then it would be safe. But if you intend to allow other high volatility stablecoins as collateral

Recommendation

Consider updating `validate_oracle_price` to accept an operation context (`is_mint: bool`) similar to ethena.

Minting: they verify `price >= min_oracle_price`

Redeeming: they verify `price <= max_oracle_price`

Resolution

Jupiter Team: The issue was resolved in commit [16aa229](#).

I-01 | Custody Separation Allows Redemption Siphon

Category	Severity	Location	Status
Informational	● Info	vault.rs: 89-90	Acknowledged

Description

After this update we had to implement to satisfy Ethena. They require that funds be sent directly to the custodian upon minting. When needed, they will withdraw funds from the custodian to the vault token account to allow redemption.

now we have two different pools for the same collateral

Mint sends collateral to the custodian ATA and not the vault

Redeem pays collateral out of the vault token account

This allows the following scenario, a user can watch for Ethena top-ups,

Assume `vault_token_account` currently has 20k USDC topped up for redemptions

User has 5k USDC

He use 5k USDC to mint the stablecoin → custodian gets the 5k , user gets 5k LP

Then redeem the 5k LP → user gets 5k USDC from `vault_token_account`

Repeat again using his same 5k until leaving the vault permanently dry, consuming all the 20k forcing Ethena into a operational treadmill ("top up → gets drained → top up again... so on")

This didn't exist In the previous design because, Mint was depositing into the same pool that redeem withdraws from, so a mint, redeem leaves the pool unchanged

Recommendation

Take care of enforcing a strict period limit for this case

Resolution

Jupiter Team: Acknowledged.

I-02 | Unused Mint Parameter In PDA Binding

Category	Severity	Location	Status
Informational	● Info	config.rs: 18	Resolved

Description

config_seeds! macro accepts a mint argument but does not include it in the seeds

```
macro_rules! config_seeds {  
    ($mint:expr, $bump:expr) => {  
        &[CONFIG_PREFIX, &[$bump]]  
    }  
}
```

This means the config pda is not bound to a specific mint

It's derived from only the constant prefix config and the bump

Today we only have one config, so the signature and presence of Config.mint: Pubkey indicates that this was a past intention to make the system per mint config

Recommendation

Remove the parameter because it's currently unused

Resolution

Jupiter Team: The issue was resolved in commit [83da261](#).

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