

TechRate
March, 2024



SMART CONTRACTS SECURITY AUDIT REPORT



Techrate_audits



Techrate



Techrate1

Audit Details



Audited project

DragonToken



Deployer address

Not deployed



Client contacts:

[DragonToken team](#)



Blockchain

Not deployed



Project website:

www.DragonFireAvax.com

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

Background

TechRate was commissioned by DragonToken to perform an audit of smart contracts on commit:

<https://github.com/breadNbutter42/Dragon/commit/1950fd85944d200caab0c7e74fb1644f1793c813>

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

Issues Checking Status

| Issue description | Checking status |
|---------------------------------------------------------------------------|-----------------|
| 1. Compiler errors. | Passed |
| 2. Race conditions and Reentrancy. Cross-function race conditions. | Passed |
| 3. Possible delays in data delivery. | Passed |
| 4. Oracle calls. | Passed |
| 5. Front running. | Passed |
| 6. Timestamp dependence. | Passed |
| 7. Integer Overflow and Underflow. | Passed |
| 8. DoS with Revert. | Passed |
| 9. DoS with block gas limit. | Low issues |
| 10. Methods execution permissions. | Passed |
| 11. Economy model of the contract. | Passed |
| 12. The impact of the exchange rate on the logic. | Passed |
| 13. Private user data leaks. | Passed |
| 14. Malicious Event log. | Passed |
| 15. Scoping and Declarations. | Passed |
| 16. Uninitialized storage pointers. | Passed |
| 17. Arithmetic accuracy. | Passed |
| 18. Design Logic. | Passed |
| 19. Cross-function race conditions. | Passed |
| 20. Safe Open Zeppelin contracts implementation and usage. | Passed |
| 21. Fallback function security. | Passed |

Security Issues

✓ High Severity Issues

No high severity issues found.

✓ Medium Severity Issues

No medium severity issues found.

✓ Low Severity Issues

1. Out of gas

Issue:

- The function `setCommunityTokens()` uses the loop to iterate through `communityTokens` list and initiates `setCtRouters()` function (also contain loop). Function will be aborted with `OUT_OF_GAS` exception if there will be a long list.
- The function `setAllowlistedForSomePhase()` uses the loop for whitelist users. It also could be aborted with `OUT_OF_GAS` exception if there will be a long addresses list.

Recommendation:

Check that the arrays length is not too big.

Notes:

- `setTreasuryAddress()`, `setFarmAddress()` and `transferOwnership()` functions don't remove previous addresses from the fees.

Owner privileges (In the period when the owner is not renounced)

- Owner can change the main DEX router address used for token swaps.
- Owner can set the array of community tokens to buy and burn LP for.
- Owner can change the DEX routers for buying community tokens.
- Owner can set the minimum amount of Dragon tokens collected as fees to swap.
- Owner can set the address of the treasury address.
- Owner can set the farm address.
- Owner can exclude an address from transfer fees.
- Owner can include an address in transfer fees.
- Owner can transfer ownership of the contract to another address.
- Owner can set the address of the external fees processor.
- Owner can set transfer fees in basis points.
- Owner can lock major fee settings.
- Owner can lock minor fee settings.
- Owner can set the start time for trading phases.
- Owner can set the maximum Wei limit for each phase to restrict whale holdings.
- Owner can lock the settings related to trading phases initialization.
- Owner can set addresses as allowlisted for a specific trading phase.
- Owner can withdraw AVAX from the contract to a specified address.
- Owner can transfer ERC20 tokens from the contract to a specified address.
- Owner can approve spending of ERC20 tokens by another address.
- Owner can transfer ERC721 tokens from the contract to a specified address.
- Owner can safely transfer ERC721 tokens from the contract to a specified address

Conclusion

Smart contracts contain low severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details are NOT provided by the team.

Security score: 83.

TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.