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AUDIT COMPANY

Smart Contract Security Audit

TechRate

July, 2021

Audit Details

Audited project

Dolomite DeFi

Deployer address

0x19E53469BdfD70e103B18D9De7627d88c4506DF2

Client contacts:

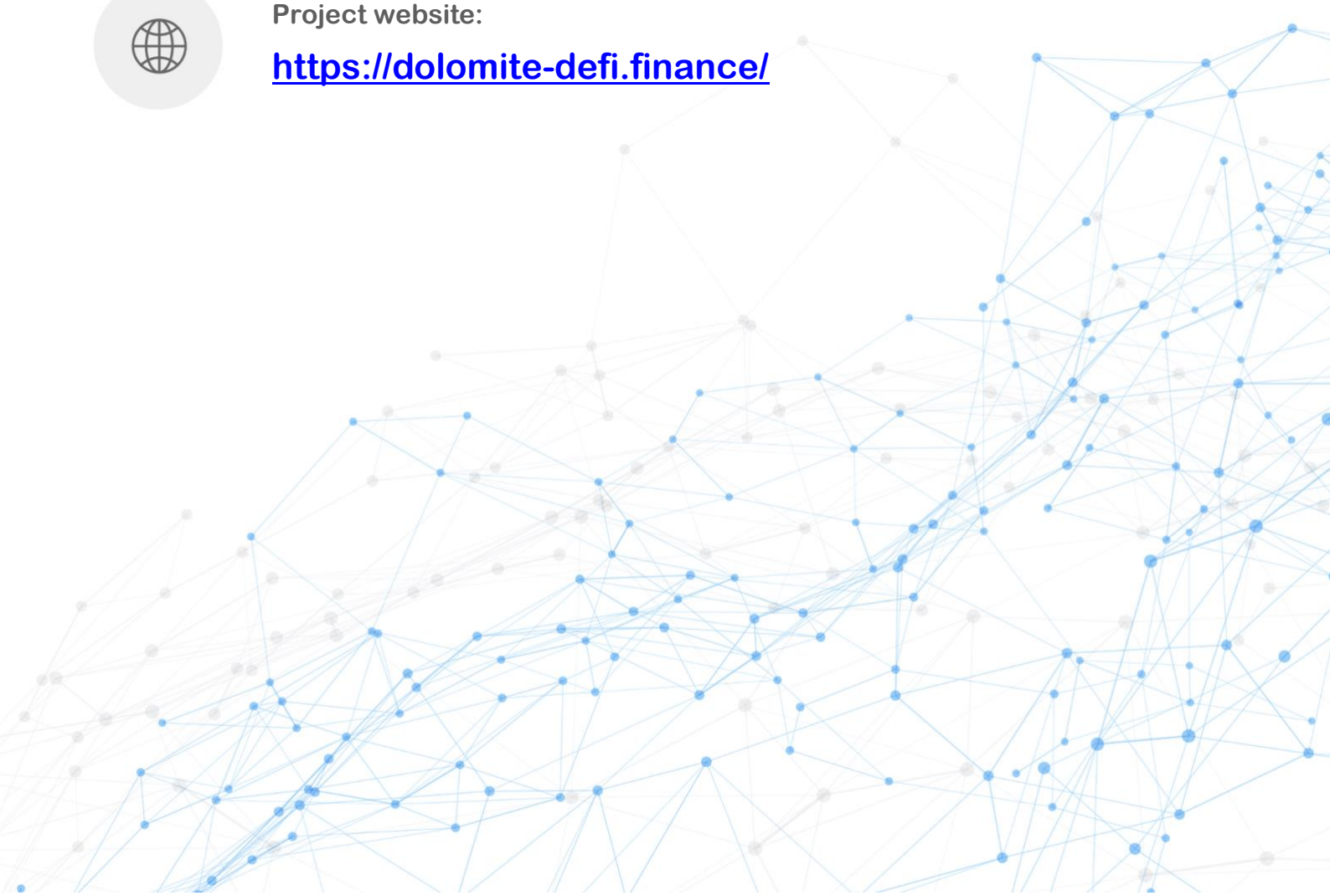
Dolomite DeFi team

Blockchain

Binance Smart Chain

Project website:

https://dolomite-defi.finance/



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 below 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 Dolomite DeFi to perform an audit of smart contracts:

- https://bscscan.com/address/0x2F6654e14976298C8117E046D9940C5792A26fcB#code
- https://bscscan.com/address/0x33fC687392fC91Af7A6361B5d29f64c7E7E12d4A#code

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.

Contracts Details

Token contract details for 08.07.2021

Contract name	Dolomite DeFi
Contract address	0x2F6654e14976298C8117E046D9940C5792A26fcB
Bonus multiplier	1
Total alloc point	10100
Start block	9158599
Pool length	16
Fee address	0xebacd85575e3dcbe16353274738e122fa105ca4e
Dolo	0xd604ab711cb67267dabf0b599a604a3c1c9aeace
Dolo per block	700000000000000000
Contract deployer address	0x19E53469BdfD70e103B18D9De7627d88c4506DF2
Contract's current owner address	0x33fc687392fc91af7a6361b5d29f64c7e7e12d4a

MasterChef functions details

+ [Lib] SafeMath
  - [Int] add
  - [Int] sub
  - [Int] sub
  - [Int] mul
  - [Int] div
  - [Int] div
  - [Int] mod
  - [Int] mod
+ [Int] IBEP20
  - [Ext] totalSupply
  - [Ext] decimals
  - [Ext] symbol
  - [Ext] name
  - [Ext] getOwner
  - [Ext] balanceOf
  - [Ext] transfer #
  - [Ext] allowance
  - [Ext] approve #
  - [Ext] transferFrom #
+ [Lib] Address
  - [Int] isContract
  - [Int] sendValue #
  - [Int] functionCall #
  - [Int] functionCall #
  - [Int] functionCallWithValue #
  - [Int] functionCallWithValue #
  - [Int] functionStaticCall
  - [Int] functionStaticCall
  - [Prv] _verifyCallResult
+ [Lib] SafeBEP20
  - [Int] safeTransfer #
  - [Int] safeTransferFrom #
  - [Int] safeApprove #
  - [Int] safeIncreaseAllowance #
  - [Int] safeDecreaseAllowance #
  - [Prv] _callOptionalReturn #
+ [Int] IDoloReferral
  - [Ext] recordReferral #
  - [Ext] recordReferralCommission #
  - [Ext] getReferrer
+ Context
  - [Int] _msgSender
  - [Int] _msgData
+ Ownable (Context)
  - [Int] <Constructor> #
  - [Pub] owner
  - [Pub] renounceOwnership #
    - modifiers: onlyOwner
  - [Pub] transferOwnership #
    - modifiers: onlyOwner
+ ReentrancyGuard

  - [Int] <Constructor> #
+ BEP20 (Context, IBEP20, Ownable)
  - [Pub] <Constructor> #
  - [Ext] getOwner
  - [Pub] name
  - [Pub] symbol
  - [Pub] decimals
  - [Pub] totalSupply
  - [Pub] balanceOf
  - [Pub] transfer #
  - [Pub] allowance
  - [Pub] approve #
  - [Pub] transferFrom #
  - [Pub] increaseAllowance #
  - [Pub] decreaseAllowance #
  - [Pub] mint #
    - modifiers: onlyOwner
  - [Int] _transfer #
  - [Int] _mint #
  - [Int] _burn #
  - [Int] _approve #
  - [Int] _burnFrom #
+ DoloToken (BEP20)
  - [Pub] mint #
    - modifiers: onlyOwner
  - [Ext] delegates
  - [Ext] delegate #
  - [Ext] delegateBySig #
  - [Ext] getCurrentVotes
  - [Ext] getPriorVotes
  - [Int] _delegate #
  - [Int] _moveDelegates #
  - [Int] _writeCheckpoint #
  - [Int] safe32
  - [Int] getChainId
+ MasterChef (Ownable, ReentrancyGuard)
  - [Pub] <Constructor> #
  - [Ext] poolLength
  - [Pub] add #
    - modifiers: onlyOwner,nonDuplicated
  - [Pub] set #
    - modifiers: onlyOwner
  - [Pub] getMultiplier
  - [Ext] pendingDolo
  - [Pub] canHarvest
  - [Pub] massUpdatePools #
  - [Pub] updatePool #
  - [Pub] deposit #
    - modifiers: nonReentrant
  - [Pub] withdraw #
    - modifiers: nonReentrant
  - [Pub] emergencyWithdraw #
    - modifiers: nonReentrant
  - [Int] payOrLockuppendingDolo #
  - [Int] safeDoloTransfer #

- [Pub] setDevAddress #
- [Pub] setFeeAddress #
- [Pub] tokenTaxRate
- [Pub] setTokenTaxRate #
  - modifiers: onlyOwner
- [Pub] updateEmissionRate #
  - modifiers: onlyOwner
- [Pub] setdoloReferral #
  - modifiers: onlyOwner
- [Pub] setReferralCommissionRate #
  - modifiers: onlyOwner
- [Int] payReferralCommission #

($) = payable function
= non-constant function

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. Block gas limit

Issue:

`add(uint256 _allocPoint, ...)`, `set(uint256 _pid, ...)` and `updateEmissionRate()` could invoke `massUpdatePools()` function, that can fail due to block gas limit if the pool size is too big.

Owner privileges

- Owner can change the referral contract.
- Owner can change the referral commission rate.
- Operator can change the transfer tax rate.

Conclusion

Smart contracts do not contain high severity issues.
Try not to stake native coins.
10% of rewards also adds to devAddress. The further transfers and operations with the funds raise are not related to this particular contract.

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.