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AUDIT COMPANY

Smart Contract Security Audit

TechRate

September, 2021

Audit Details

Audited project

FIA Protocol

Deployer address

0xa36A1231BAb33968b2013aF73302CD2541833333

Client contacts:

FIA Protocol team

Blockchain

Binance Smart Chain

Project website:

https://fiaprotocol.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 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

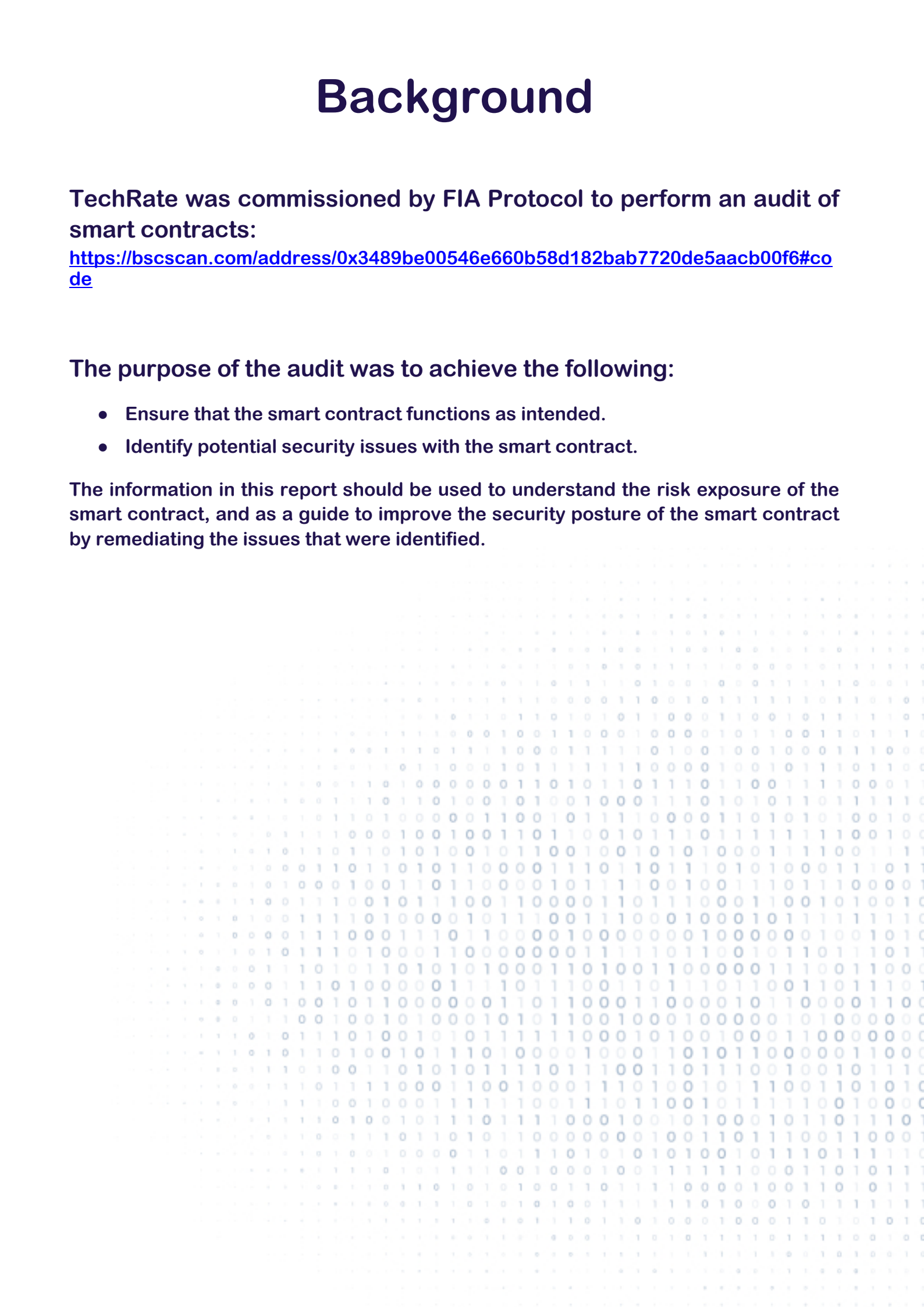
TechRate was commissioned by FIA Protocol to perform an audit of smart contracts:

https://bscscan.com/address/0x3489be00546e660b58d182bab7720de5aacb00f6#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

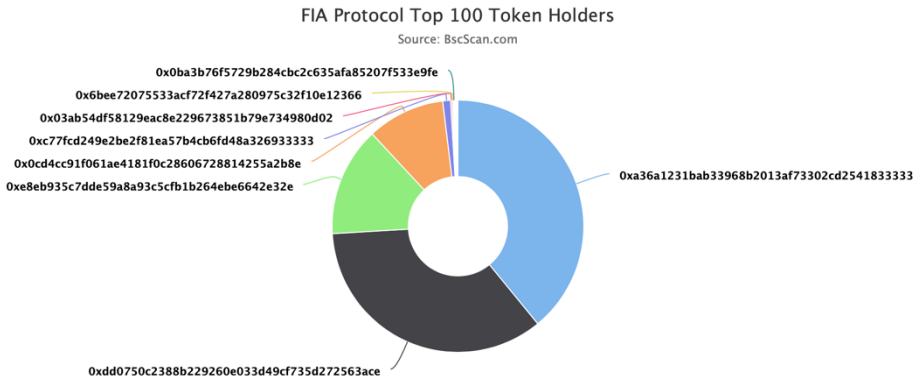
Token contract details for 13.09.2021

Contract name	FIA Protocol
Contract address	0x3489bE00546e660b58d182Bab7720de5aACb00F6
Total supply	500,000,000
Token ticker	FIA
Decimals	18
Token holders	93
Transactions count	115
Top 100 holders dominance	100%
Contract deployer address	0xa36A1231BAb33968b2013aF73302CD2541833333
Contract's current owner address	0xa36a1231bab33968b2013af73302cd2541833333

FIA Protocol Token Distribution

The top 100 holders collectively own 100.00% (500,000,000.00 Tokens) of FIA Protocol

Token Total Supply: 500,000,000.00 Token | Total Token Holders: 93

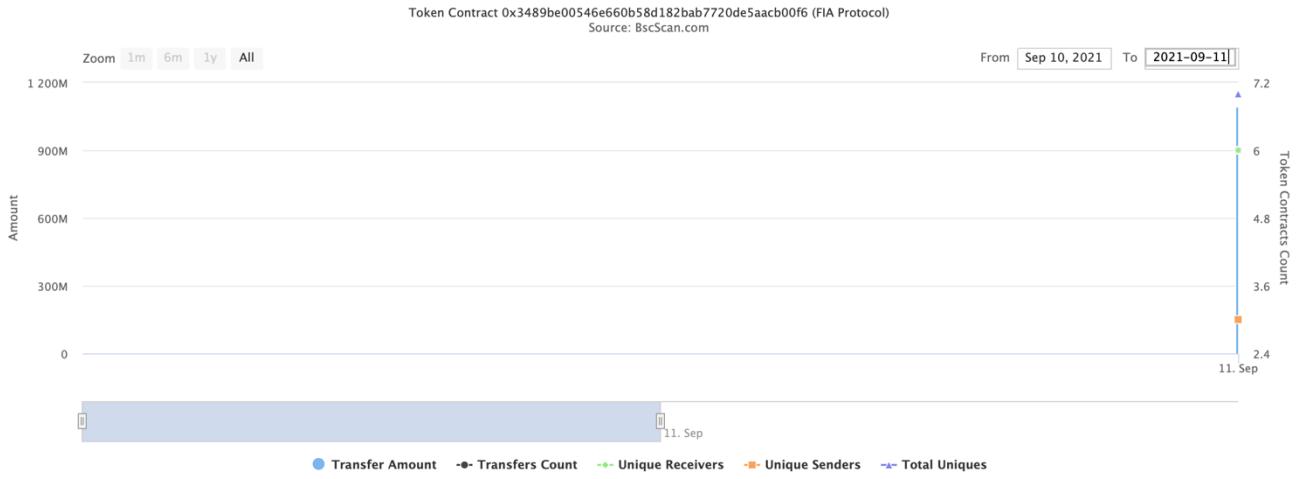


(A total of 500,000,000.00 tokens held by the top 100 accounts from the total supply of 500,000,000.00 token)

FIA Protocol Contract Interaction Details

Time Series: Token Contract Overview

Sat 11, Sept 2021 - Sat 11, Sept 2021



FIA Protocol Top 10 Token Holders

Rank	Address	Quantity	Percentage	Analytics
1	0xa36a1231bab33968b2013af73302cd2541833333	195,342,207.806000000007602176	39.0684%	
2	0xdd0750c2388b229260e033d49cf735d272563ace	175,000,000	35.0000%	
3	0xe8eb935c7dde59a8a93c5cfb1b264ebe6642e32e	70,000,000	14.0000%	
4	0x0cd4cc91f061ae4181f0c28606728814255a2b8e	50,000,000	10.0000%	
5	0xc77fcd249e2be2f81ea57b4cb6fd48a326933333	5,000,000	1.0000%	
6	0x03ab54df58129eac8e229673851b79e734980d02	1,000,000	0.2000%	
7	0x6bee72075533acf72f427a280975c32f10e12366	841,673	0.1683%	
8	0x0ba3b76f5729b284cbc2c635afa85207f533e9fe	587,546	0.1175%	
9	0x774f25f1d5b9ca55ecd848d58258a6ecc9e8e937	286,300	0.0573%	
10	0xdd4a49c55bbc4a31d75e378e972be6008cffc141	245,454	0.0491%	

Contract functions details

+ [Lib] SafeMath
  - [Int] mul
  - [Int] div
  - [Int] sub
  - [Int] add

+ [Int] IERC20
  - [Ext] totalSupply
  - [Ext] balanceOf
  - [Ext] transfer #
  - [Ext] allowance
  - [Ext] approve #
  - [Ext] transferFrom #

+ Ownable
  - [Pub] transferOwnership #
    - modifiers: onlyOwner

+ Pausable (Ownable)
  - [Pub] pause #
    - modifiers: onlyOwner,whenNotPaused
  - [Pub] unpause #
    - modifiers: onlyOwner,whenPaused

+ ERC20Basic
  - [Pub] balanceOf
  - [Pub] transfer #

+ ERC20 (ERC20Basic)
  - [Pub] allowance
  - [Pub] transferFrom #
  - [Pub] approve #

+ StandardToken (ERC20)
  - [Pub] transfer #
  - [Pub] balanceOf
  - [Pub] transferFrom #
  - [Pub] approve #
  - [Pub] allowance
  - [Pub] increaseApproval #
  - [Pub] decreaseApproval #
  - [Int] _blackList #

+ PausableToken (StandardToken, Pausable)
  - [Pub] transfer #
    - modifiers: whenNotPaused
  - [Pub] transferFrom #
    - modifiers: whenNotPaused
  - [Pub] approve #
    - modifiers: whenNotPaused
  - [Pub] increaseApproval #

    - modifiers: whenNotPaused
  - [Pub] decreaseApproval #
    - modifiers: whenNotPaused
  - [Pub] blackListAddress #
    - modifiers: whenNotPaused,onlyOwner

+ FIA (PausableToken)
  - [Pub] <Constructor> #
  - [Pub] burn #
  - [Int] _burn #
  - [Pub] transferToken #
    - modifiers: onlyOwner

($) = 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.	Passed
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

No low severity issues found.

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

- Owner can withdraw tokens from the contract.

```
function transferToken(IERC20 token) public onlyOwner {
    token.transfer(msg.sender, token.balanceOf(address(this)));
}
```

- Owner can blacklist any address.

```
function _blackList(address _address, bool _isBlackListed) internal returns (bool) {
    require(tokenBlacklist[_address] != _isBlackListed);
    tokenBlacklist[_address] = _isBlackListed;
    emit Blacklist(_address, _isBlackListed);
    return true;
}
function blackListAddress(address listAddress, bool isBlackListed) public whenNotPaused onlyOwner returns (bool success) {
    return super._blackList(listAddress, isBlackListed);
}
```

- Owner can pause / unpause contract.

```
/**
 * @dev called by the owner to pause, triggers stopped state
 */
function pause() onlyOwner whenNotPaused public {
    paused = true;
    emit Pause();
}

/**
 * @dev called by the owner to unpause, returns to normal state
 */
function unpause() onlyOwner whenPaused public {
    paused = false;
    emit Unpause();
}
```

Conclusion

Smart contracts contain owner privileges!

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.