HackSafe

Smart Contract Security Audit Report

SmartGlobal

January 2023

Security Status

★ ★ ★ ★ ★

www.hacksafe.io

Audit Details

Audited project
SmartGlobal

Deployer address
TU4HxgwCZ6CSSkkDx8XscXVb5fj2uhq86m

Client contacts
SmartGlobal Team

Blockchain
Tronchain

Website
Not provided

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.

Procedure

Step 1 - In-Depth Manual Review

Manual line-by-line code reviews to ensure the logic behind each function is sound and safe from various attack vectors. This is the most important and lengthy portion of the audit process (as automated tools often cannot find the nuances that lead to exploits such as flash loan attacks).

Step 2 - Automated Testing

Simulation of a variety of interactions with your Smart Contract on a test blockchain leveraging a combination of automated test tools and manual testing to determine if any security vulnerabilities exist.

Step 3 – Leadership Review

The engineers assigned to the audit will schedule meetings with our leadership team to review the contracts, any comments or findings, and ask questions to further apply adversarial thinking to discuss less common attack vectors.

Step 4 - Resolution of Issues

Consulting with the team to provide our recommendations to ensure the code's security and optimize its gas efficiency, if possible. We assist project team's in resolving any outstanding issues or implementing our recommendations.

Step 5 - Published Audit Report

Boiling down results and findings into an easy-to-read report tailored to the project. Our audit reports highlight resolved issues and any risks that exist to the project or its users, along with any remaining suggested remediation measures. Diagrams are included at the end of each report to help users understand the interactions which occur within the project.

Background

HackSafe was commissioned by SmartGlobal to perform an audit of smart contracts:

- https://tronscan.org/#/contract/TGrniPhzXr2sdMEdGtjCzzuGQ95m4A7r7L/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 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.

Contract Details

Token contract details for 03.01.2023

Token Type	: DEFI
Contract name	: SmartGlobal
Contract address	: TGrniPhzXr2sdMEdGtjCzzuGQ95m4A7r7L
Total supply	: 1,000,000,000.000000
Token ticker	: SGB
Decimals	: 9
Token Holders	: 54
Transactions count	: 253
Compiler version	: solidity 0.5.10
Contract deployer address	: TU4HxgwCZ6CSSkkDx8XscXVb5fj2uhq86m
Owner address	: No owner

Audit Summary

According to the standard audit assessment, Customer`s solidity smart contracts are **“Well Secure”**. This token contract does not contain owner control, which do make it fully decentralized.

Insecure	Poor secured	Secure	Well-secured

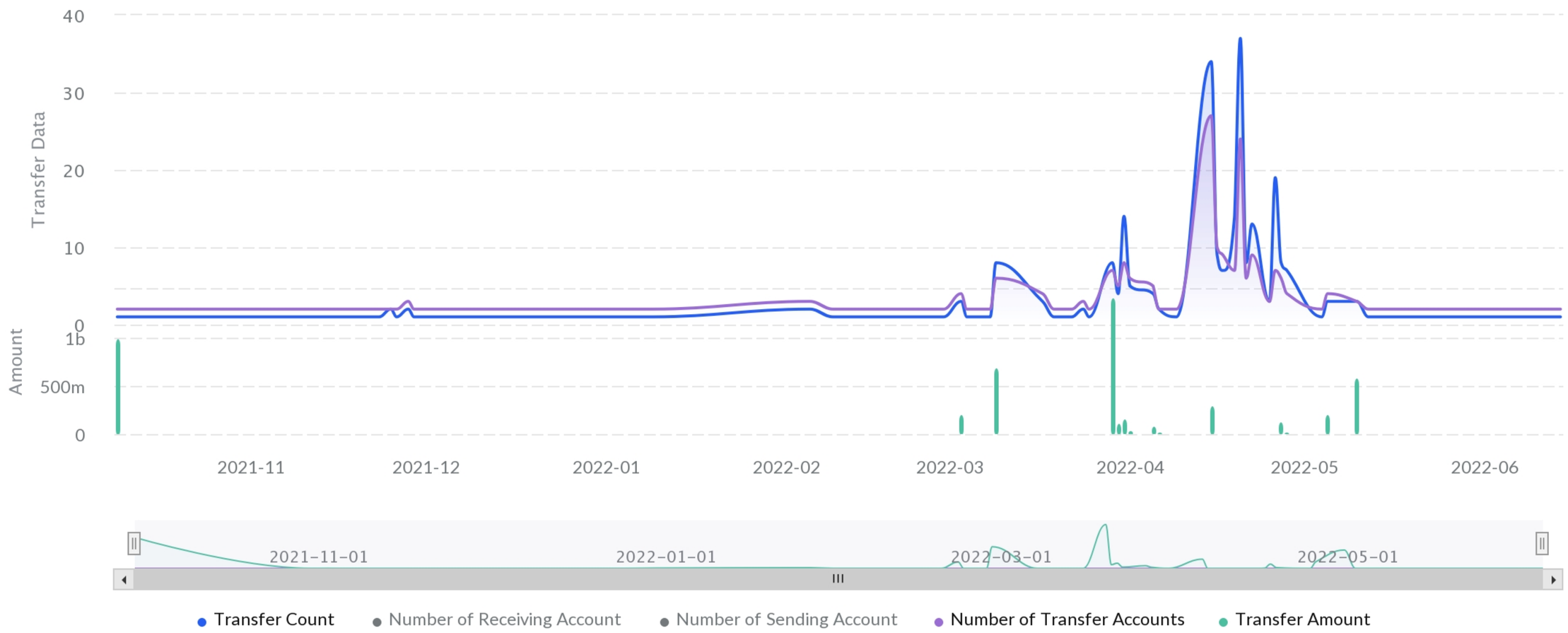
You are here 

We used various tools like Slither, Mythril and Remix IDE. At the same time this finding is based on critical analysis of the manual audit. All issues found during automated analysis were manually reviewed and applicable vulnerabilities are presented in the issues checking status.

We found 0 critical, 0 high, 0 medium and 1 low.

SmartGlobal Token Distribution

SmartGlobal transfer overview



SmartGlobal Top 20Token Holders

#	Address	Amount	Value	Percentage	Latest Txn Time (UTC)
1	SC TGrniPhzXr2sdMEdGtjCzzuGQ95m4A7r7L	592,553,616.499999958	--	59.255362%	2022-05-10 11:04:30
2	SC TDaHY8XivcbkjiBiDFa1NWC9HtsruPFULU	126,996,762.922406401	--	12.699676%	2022-05-05 02:10:27
3	TNKn47ZXqkLMHKgyC8To4obdfgdpwFdyg2	99,443,936.349939229	--	9.944394%	2022-04-22 17:21:24
4	TThwzu2NPzRqvY5NtBrUKYU88XYz9wZY4e	98,500,000.000000000	--	9.85%	2022-03-29 19:45:24
5	TDdXCQeQ3z8iojN8SXNa6H9EnKiiSwBES2	38,400,000.000000000	--	3.84%	2022-03-29 19:57:54
6	SC TVAHuLq3s4UA4iHhJAdniWTwpyAmygdqPp	15,053,003.456324620	--	1.5053%	2022-05-05 02:10:27
7	TCDvikPiPuA1bzwZb4R8mgDFmttBBNobFK	10,865,323.708757313	--	1.086532%	2022-04-28 13:26:24
8	TS4gPnNjjYP4JV3BDifmTf56HpXVdBnXgX	4,690,000.000000000	--	0.469%	2022-04-15 20:23:30
9	TV5uQ8b7JVMdm4Kxz8fJrM98XoZqr2U8Ea	3,600,000.000000000	--	0.36%	2022-04-01 14:23:18
10	TARoW1DFdi6EutJjUHpX42iFobKLdwdXER	2,544,364.807446641	--	0.254436%	2022-04-28 11:33:24
11	TGsg7RwLesiLizJQkpCXTqPGGnkB8CNtuS	2,000,000.000000000	--	0.2%	2022-03-31 19:47:03
12	TMrcWRD9gT8vCNnh8rGyT2jGYEj2ZK8hnu	1,100,000.000000000	--	0.11%	2022-05-12 11:30:36
13	TMx8py8ikPEecwqNZQ8CVoemB5Brnw6CU9	1,000,000.000000000	--	0.1%	2022-03-30 21:48:03
14	TAt7H4cJt6ffUBEMRRVYpEqXVkdrzYC5xa	1,000,000.000000000	--	0.1%	2022-02-09 13:55:57
15	TMy2LyL4VU775YmtEM4A7LjFXpP6dPBT3f	280,200.000000000	--	0.02802%	2022-04-20 05:16:03
16	TVAVoPi5k7diqGGh1AvXikgVLhvyykAPd1	212,010.000000000	--	0.021201%	2022-03-24 15:28:54
17	TTCYWgqFzdJFyyriYPxr2ZvwNYVMBn7RDa	205,000.000000000	--	0.0205%	2021-11-23 22:41:09
18	TGdQYqgT8xFdN2aEaJg3jc5Y3zKLXxbBP8	203,001.000000000	--	0.0203%	2021-11-25 18:10:24

SmartGlobal Token Distribution

SmartGlobal Top 20Token Holders

19	TGuB6YuPzjsudPmnEnHuPfCFqre8DudZon	200,000.000000000	--	0.02%	2022-04-20 05:27:30
20	TSk91ZnaavV9shUs2N4fNgmqg1DouSNuxN	182,752.519243655	--	0.018275%	2022-04-22 17:56:45

Contract functions details

ITRC20.sol
+ [Int] ITRC20
    -[Ext] totalSupply
    -[Ext] balanceOf
    -[Ext] transfer #
    -[Ext] allowance
    -[Ext] approve #
    -[Ext] transferFrom #

SafeMath.sol
+[Lib] SafeMath
    -[Int] add
    -[Int] sub
    -[Int] mul
    -[Int] div
    -[Int] mod

TRC20.sol
+TRC20 (ITRC20)
    -[Pub] totalSupply
    -[Pub] balanceOf
    -[Pub] transfer #
    -[Pub] allowance
    -[Pub] approve #
    -[Pub] transferFrom #
    -[Pub] increaseAllowance #
    -[Pub] decreaseAllowance #
    -[Int] _transfer #
    -[Int] _mint #
    -[Int] _burn #
    -[Int] _approve #
    -[Int] _burnFrom #

TRC20Detailed.sol
+TRC20Detailed (ITRC20)
    -[Pub] <constructor>
    -[Pub] name
    -[Pub] symbol
    -[Pub] decimals

Contract functions details

Token.sol
+SmartGlobal (TRC20, TRC20Detailed)
-[Pub] <constructor> #

($) = payable function
= non-constant function

Issues Checking Status

No.	Title	Status
1.	Compiler error	Passed
2.	Missing Input Validation	Passed
3.	Race conditions and Reentrancy. Cross-function race conditions.	Passed
4.	Possible delays in data delivery	Passed
5.	Oracle calls.	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.	Private use data leaks.	Passed
13.	Malicious Event log.	Passed
14.	Scoping and Declarations.	Passed
15.	Uninitialized storage pointers.	Passed
16.	Arithmetic accuracy.	Passed
17.	Design Logic.	Passed
18.	Safe Open Zeppelin contracts implementation and usage.	Passed
19.	Incorrect Naming State Variable	Passed
20.	Too old version	Low issue

Severity Definitions

Risk Level	Description
Critical	Critical vulnerabilities are usually straightforward to exploit and can lead to assets loss or data manipulations.
High	High-level vulnerabilities are difficult to exploit; however, they also have a significant impact on smart contract execution, e.g., public access to crucial functions
Medium	Medium-level vulnerabilities are important to fix; however, they can't lead to assets loss or data manipulations.
Low	Low-level vulnerabilities are mostly related to outdated, unused, etc. code snippets that can't have a significant impact on execution.

Security Issues

- **Critical Severity Issues**
  No critical severity issue found.
- **High Severity Issues**
  No high severity issue found.
- **Medium Severity Issues**
  No medium severity issue found.
- **Low Severity Issues**
  One low severity issue found.

1. Old compiler version

- **Description**
  Contract has been deployed using too old solidity version.
- **Recommendation**
  It is advisable to deploy contract using any of the latest version of solidity.

Conclusion

Smart contract contains low severity issues! The further transfer and operations with the fund raised are not related to this particular contract.

HackSafe 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.