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**Blockchain Security | Smart Contract Audits | KYC
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MADE IN GERMANY

Alt Signals Audit

**Security Assessment
10. February, 2023**

For



ALTSIGNALS



SolidProof_io



@solidproof_io

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Version	Date	Description
1.0	4. February 2023	<ul style="list-style-type: none">• Layout project• Automated- /Manual-Security Testing• Summary

Network

Ethereum

Website

<https://www.altsignals.io/>

Telegram

<https://t.me/altsignals>

Twitter

<https://twitter.com/AltSignalseng>

YouTube

<https://www.youtube.com/channel/UCd39ssLSMBjXs4oC7ai541w>

TikTok

<https://www.tiktok.com/@altsignals?lang=en>

Instagram

<https://www.instagram.com/altsignals.io/?hl=en>

Description

AltSignals has been running without stop since 2017, unlike many other services which often pop up and disappear after a few months, Usually leaving you high and dry after you've parted with your cash.

With so many scams in this business its important to deal with a company who is trusted and has a strong track record of results, which can be found in our results section.

Our Binance Futures and Forex signals are consistently profitable month on month, with accuracy in 80%+ range usually.

Project Engagement

During the Date of 4th of February 2023, **Alt Signals Team** engaged Solidproof.io to audit smart contracts that they created. The engagement was technical in nature and focused on identifying security flaws in the design and implementation of the contracts. They provided Solidproof.io with access to their code repository and whitepaper.

Logo



Contract Link v1.0

- <https://github.com/blck-media-tech/alt-contracts/tree/main/contracts>
- Commit: fdf3d7fea7574dcd16305191f7df88e54dc95ac4

Vulnerability & Risk Level

Risk represents the probability that a certain source-threat will exploit vulnerability, and the impact of that event on the organization or system. Risk Level is computed based on CVSS version 3.0.

Level	Value	Vulnerability	Risk (Required Action)
Critical	9 - 10	A vulnerability that can disrupt the contract functioning in a number of scenarios, or creates a risk that the contract may be broken.	Immediate action to reduce risk level.
High	7 - 8.9	A vulnerability that affects the desired outcome when using a contract, or provides the opportunity to use a contract in an unintended way.	Implementation of corrective actions as soon as possible.
Medium	4 - 6.9	A vulnerability that could affect the desired outcome of executing the contract in a specific scenario.	Implementation of corrective actions in a certain period.
Low	2 - 3.9	A vulnerability that does not have a significant impact on possible scenarios for the use of the contract and is probably subjective.	Implementation of certain corrective actions or accepting the risk.
Informational	0 - 1.9	A vulnerability that have informational character but is not effecting any of the code.	An observation that does not determine a level of risk

Auditing Strategy and Techniques Applied

Throughout the review process, care was taken to evaluate the repository for security-related issues, code quality, and adherence to specification and best practices. To do so, reviewed line-by-line by our team of expert pentesters and smart contract developers, documenting any issues as there were discovered.

Methodology

The auditing process follows a routine series of steps:

1. Code review that includes the following:
 - i) Review of the specifications, sources, and instructions provided to SolidProof to make sure we understand the size, scope, and functionality of the smart contract.
 - ii) Manual review of code, which is the process of reading source code line-by-line in an attempt to identify potential vulnerabilities.
 - iii) Comparison to specification, which is the process of checking whether the code does what the specifications, sources, and instructions provided to SolidProof describe.
2. Testing and automated analysis that includes the following:
 - i) Test coverage analysis, which is the process of determining whether the test cases are actually covering the code and how much code is exercised when we run those test cases.
 - ii) Symbolic execution, which is analysing a program to determine what inputs causes each part of a program to execute.
3. Best practices review, which is a review of the smart contracts to improve efficiency, effectiveness, clarify, maintainability, security, and control based on the established industry and academic practices, recommendations, and research.
4. Specific, itemized, actionable recommendations to help you take steps to secure your smart contracts.

Used Code from other Frameworks/Smart Contracts (direct imports)

Imported packages:

Dependency / Import Path	Count
@openzeppelin/contracts/access/Ownable.sol	2
@openzeppelin/contracts/security/Pausable.sol	1
@openzeppelin/contracts/security/ReentrancyGuard.sol	1
@openzeppelin/contracts/token/ERC20/ERC20.sol	1
@openzeppelin/contracts/token/ERC20/IERC20.sol	1
@openzeppelin/contracts/token/ERC20/extensions/ERC20Capped.sol	1
@openzeppelin/contracts/token/ERC20/utils/SafeERC20.sol	1

Tested Contract Files

This audit covered the following files listed below with a SHA-1 Hash.

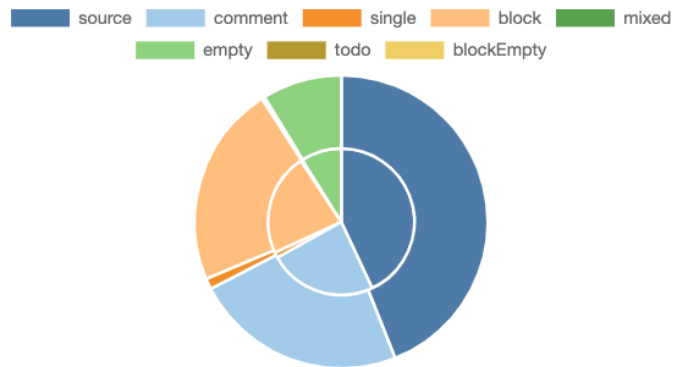
A file with a different Hash has been modified, intentionally or otherwise, after the security review. A different Hash could be (but not necessarily) an indication of a changed condition or potential vulnerability that was not within the scope of this review.

v1.0

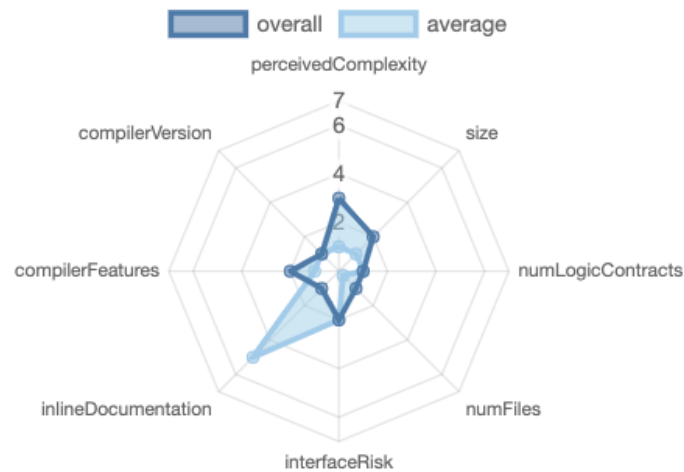
File Name	SHA-1 Hash
contracts/interfaces/IPresale.sol	b675b607bcacbe8bc9cc038c7de1970ea5966ca6
contracts/interfaces/ IChainlinkPriceFeed.sol	eba8c00d573270d0c414854a02a1ab10d6180708
contracts/ASIPresale.sol	2edf069a7025568595bc9db2b8f3e1b8736f91a0
contracts/ASIToken.sol	2126c59cea79f38b415670f5b6423adb87dc35b

Metrics

Source Lines v1.0



Risk Level v1.0



Capabilities

Components

 Contracts	 Libraries	 Interfaces	 Abstract
2	0	2	0

Exposed Functions

This section lists functions that are explicitly declared public or payable. Please note that getter methods for public stateVars are not included.





 Public	 Payable
19	1

External	Internal	Private	Pure	View
15	17	0	0	9

StateVariables

Total	 Public
13	12

Capabilities

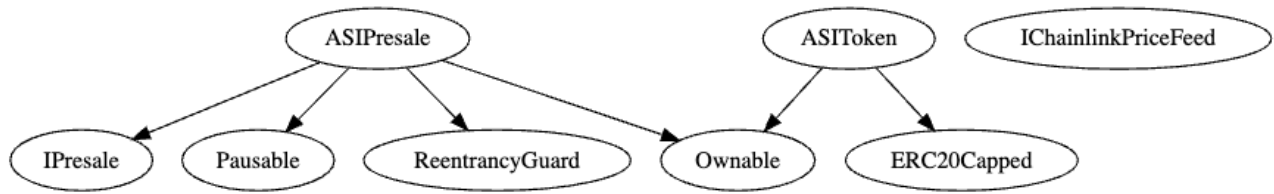
Solidity Versions observed	 Experimental Features	 Can Receive Funds	 Uses Assembly	 Has Destroyable Contracts
<div><div>^0.8.17</div><div>^0.8.0</div></div>		yes		

 Transfers ETH	 Low-Level Calls	 DelegateCall	 Uses Hash Functions	 ECRRecover	 New/Create/Create2

 TryCatch	 Unchecked

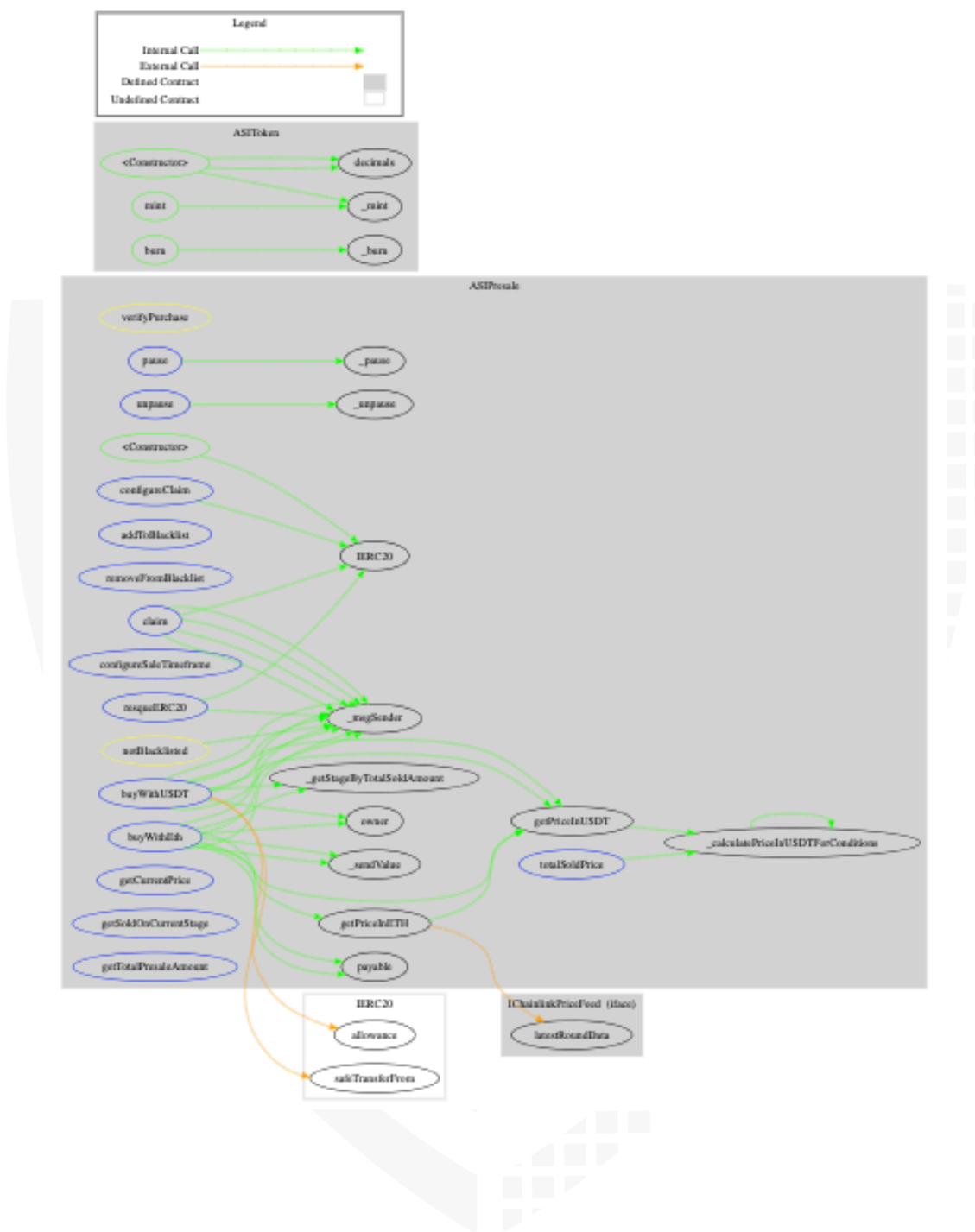
Inheritance Graph

v1.0



CallGraph

v1.0



Scope of Work/Verify Claims

The above token Team provided us with the files that needs to be tested (Github, Bscscan, Etherscan, files, etc.). The scope of the audit is the main contract (usual the same name as team appended with .sol).

We will verify the following claims:

1. Is contract an upgradeable
2. Correct implementation of Token standard
3. Deployer cannot mint any new tokens
4. Deployer cannot burn or lock user funds
5. Deployer cannot pause the contract
6. Deployer cannot set fees
7. Deployer cannot blacklist/antisnipe addresses
8. Overall checkup (Smart Contract Security)



Is contract an upgradeable

Name	
Is contract an upgradeable?	No



Correct implementation of Token standard

ERC20				
Function	Description	Exist	Tested	Verified
TotalSupply	Provides information about the total token supply	✓	✓	✓
BalanceOf	Provides account balance of the owner's account	✓	✓	✓
Transfer	Executes transfers of a specified number of tokens to a specified address	✓	✓	✓
TransferFrom	Executes transfers of a specified number of tokens from a specified address	✓	✓	✓
Approve	Allow a spender to withdraw a set number of tokens from a specified account	✓	✓	✓
Allowance	Returns a set number of tokens from a spender to the owner	✓	✓	✓

Write functions of contract v1.0

- ◆ pause
- ◆ unpause
- ◆ addToBlacklist
- ◆ removeFromBlacklist
- ◆ resqueERC20
- ◆ configureSaleTimeframe
- ◆ configureClaim
- ◆ buyWithEth 💰
- ◆ buyWithUSDT
- ◆ claim

Deployer cannot mint any new tokens

Name	Exist	Tested	Status
Deployer can mint	✓	✓	✗
Max / Total Supply	N/A		

Comments:

v1.0

- Owner can mint new tokens until the maximum cap is reached, and that will be decided at the time of Deployment.

Deployer cannot burn or lock user funds

Name	Exist	Tested	Status
Deployer can lock	✓	✓	✗
Deployer cannot burn	✓	✓	✓

Comments:

v1.0

- Owner can lock user funds by
 - blacklisting addresses
 - Updating the claim start time after the tokens are sold to any arbitrary time, even setting it into the past is also possible which may lead to instant claims. No investor will be able to claim tokens because claim start time will be too long.

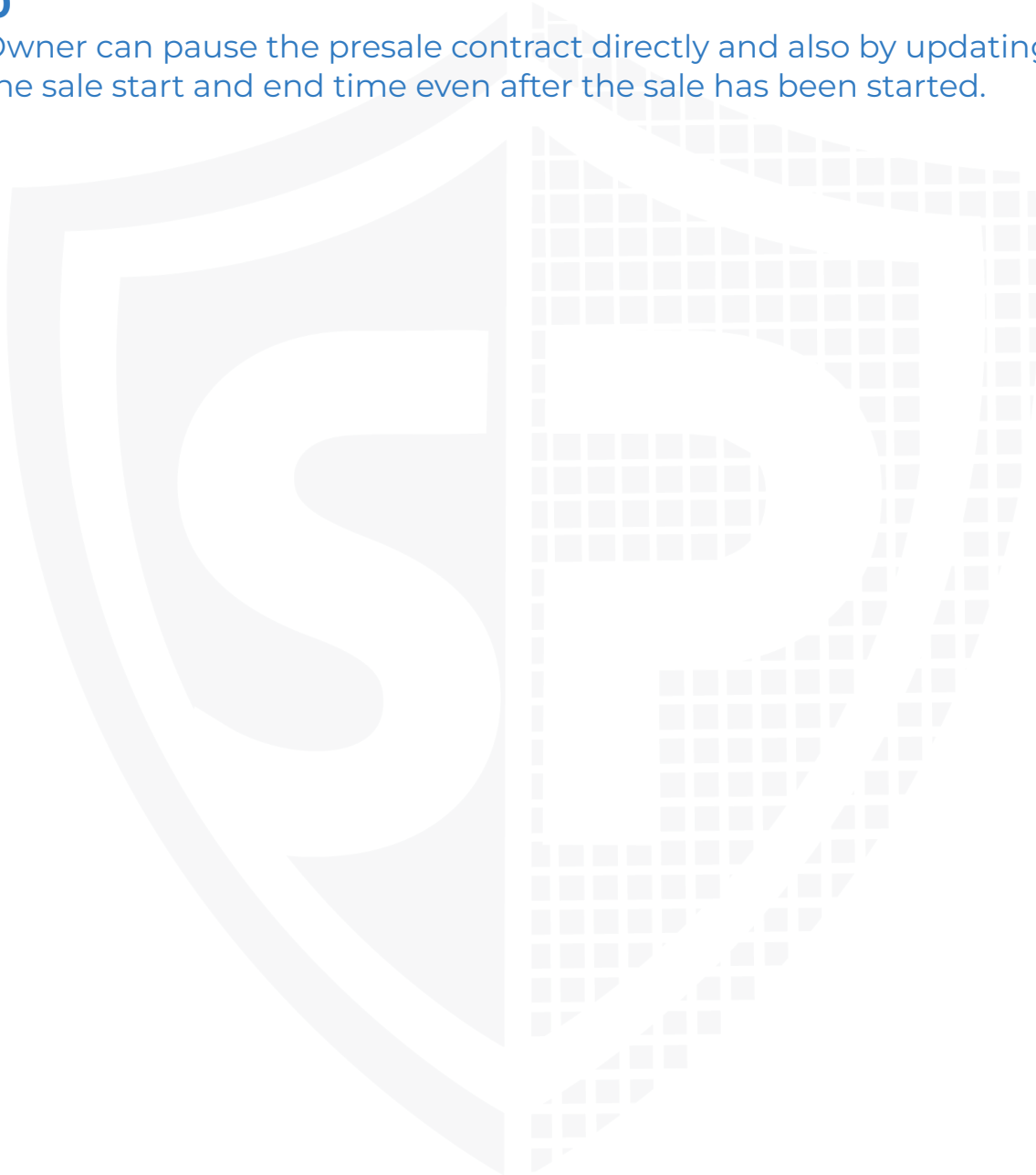
Deployer cannot pause the contract

Name	Exist	Tested	Status
Deployer can pause	✓	✓	✗

Comments:

v1.0

- Owner can pause the presale contract directly and also by updating the sale start and end time even after the sale has been started.



Deployer cannot set fees

Name	Exist	Tested	Status
Deployer cannot set fees over 25%	—	—	—
Deployer cannot set fees to nearly 100% or to 100%	—	—	—



Deployer can blacklist/antisnipe addresses

Name	Exist	Tested	Status
Deployer can blacklist/antisnipe addresses	✓	✓	✗

Comments:

v1.0

- Owner is able to blacklist addresses from the presale



Overall checkup (Smart Contract Security)

Tested	Verified
✓	✓

Legend

Attribute	Symbol
Verified / Checked	✓
Partly Verified	⚠
Unverified / Not checked	✗
Not available	—

Modifiers and public functions v1.0

⚡	pause
Ⓜ	onlyOwner
⚡	unpause
Ⓜ	onlyOwner
⚡	addToBlacklist
Ⓜ	onlyOwner
⚡	removeFromBlacklist
Ⓜ	onlyOwner
⚡	resqueERC20
Ⓜ	onlyOwner
⚡	configureSaleTimeframe
Ⓜ	onlyOwner
⚡	configureClaim
Ⓜ	onlyOwner
⚡	buyWithEth 💰
Ⓜ	notBlacklisted
Ⓜ	verifyPurchase
Ⓜ	whenNotPaused
Ⓜ	nonReentrant
⚡	buyWithUSDT
Ⓜ	notBlacklisted
Ⓜ	verifyPurchase
Ⓜ	whenNotPaused
Ⓜ	nonReentrant
⚡	claim
Ⓜ	whenNotPaused

Ownership Privileges:

- Withdraw tokens from the presale contract including the sale token, which is not recommended because this way owner can have both the ETH and USDT, alongside the sale token

Please check if an OnlyOwner or similar restrictive modifier has been forgotten.

Source Units in Scope

v1.0

File	Logic Contracts	Interfaces	Lines	nLines	nSLOC	Comment Lines	Complex. Score
contracts/interfaces/IPresale.sol	—————	1	30	30	25	1	1
contracts/interfaces/IChainlinkPriceFeed.sol	—————	1	15	5	3	1	3
contracts/ASIPresale.sol	1	—————	381	381	205	135	156
contracts/ASIToken.sol	1	—————	24	24	18	2	18
Totals	2	2	450	440	251	139	178

Legend

Attribute	Description
Lines	total lines of the source unit
nLines	normalised lines of the source unit (e.g. normalises functions spanning multiple lines)
nSLOC	normalised source lines of code (only source-code lines; no comments, no blank lines)
Comment Lines	lines containing single or block comments
Complexity Score	a custom complexity score derived from code statements that are known to introduce code complexity (branches, loops, calls, external interfaces, ...)

Audit Results

Critical issues

No critical issues

High issues

No high issues

Medium issues

Issue	File	Type	Line	Description
#1	ASIPresale.sol	Owner can Withdraw funds	190	<p>The owner can withdraw all the funds from the presale contract because there is no protection against passing the sale token address in the 'resqueERC20' function.</p> <p>We recommend to put a check in place to prevent this from happening.</p>

Low issues

Issue	File	Type	Line	Description
#1	All	A floating pragma is set	—	The current pragma Solidity directive is „^0.8.17“.
#2	ASIPresale.sol	Missing Zero Address Validation (missing-zero-check)	167, 178	Check that the address is not zero
#3	ASIPresale.sol	Missing Events Arithmetic	All	Emit an event for critical parameter changes

Informational issues

Issue	File	Type	Line	Description
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#1	ASIPres ale.sol	Misspelling	190	Change following words: - 'resque' Make sure to change it everywhere else as well.
#2	Main	NatSpec documentation missing	-	If you started to comment your code, also comment all other functions, variables etc.

Audit Comments

We recommend you to use the special form of comments (NatSpec Format, Follow link for more information <https://docs.soliditylang.org/en/latest/natspec-format.html>) for your contracts to provide rich documentation for functions, return variables and more. This helps investors to make clear what that variables, functions etc. do.

10. February 2023:

- There is still an owner (Owner still has not renounced ownership)
- Read whole report and modifiers section for more information

SWC Attacks

ID	Title	Relationships	Status
SW C-1 36	Unencrypted Private Data On-Chain	CWE-767: Access to Critical Private Variable via Public Method	PASSED
SW C-1 35	Code With No Effects	CWE-1164: Irrelevant Code	PASSED
SW C-1 34	Message call with hardcoded gas amount	CWE-655: Improper Initialization	PASSED
SW C-1 33	Hash Collisions With Multiple Variable Length Arguments	CWE-294: Authentication Bypass by Capture-replay	PASSED
SW C-1 32	Unexpected Ether balance	CWE-667: Improper Locking	PASSED
SW C-1 31	Presence of unused variables	CWE-1164: Irrelevant Code	PASSED
SW C-1 30	Right-To-Left-Override control character (U+202E)	CWE-451: User Interface (UI) Misrepresentation of Critical Information	PASSED
SW C-1 29	Typographical Error	CWE-480: Use of Incorrect Operator	PASSED
SW C-1 28	DoS With Block Gas Limit	CWE-400: Uncontrolled Resource Consumption	PASSED

SW C-1 27	Arbitrary Jump with Function Type Variable	CWE-695: Use of Low-Level Functionality	PASSED
SW C-1 25	Incorrect Inheritance Order	CWE-696: Incorrect Behavior Order	PASSED
SW C-1 24	Write to Arbitrary Storage Location	CWE-123: Write-what-where Condition	PASSED
SW C-1 23	Requirement Violation	CWE-573: Improper Following of Specification by Caller	PASSED
SW C-1 22	Lack of Proper Signature Verification	CWE-345: Insufficient Verification of Data Authenticity	PASSED
SW C-1 21	Missing Protection against Signature Replay Attacks	CWE-347: Improper Verification of Cryptographic Signature	PASSED
SW C-1 20	Weak Sources of Randomness from Chain Attributes	CWE-330: Use of Insufficiently Random Values	PASSED
SW C-11 9	Shadowing State Variables	CWE-710: Improper Adherence to Coding Standards	PASSED
SW C-11 8	Incorrect Constructor Name	CWE-665: Improper Initialization	PASSED
SW C-11 7	Signature Malleability	CWE-347: Improper Verification of Cryptographic Signature	PASSED

SW C-11 6	Timestamp Dependence	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
SW C-11 5	Authorization through tx.origin	CWE-477: Use of Obsolete Function	PASSED
SW C-11 4	Transaction Order Dependence	CWE-362: Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition')	PASSED
SW C-11 3	DoS with Failed Call	CWE-703: Improper Check or Handling of Exceptional Conditions	PASSED
SW C-11 2	Delegatecall to Untrusted Callee	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
SW C-11 1	Use of Deprecated Solidity Functions	CWE-477: Use of Obsolete Function	PASSED
SW C-11 0	Assert Violation	CWE-670: Always-Incorrect Control Flow Implementation	PASSED
SW C-1 09	Uninitialized Storage Pointer	CWE-824: Access of Uninitialized Pointer	PASSED
SW C-1 08	State Variable Default Visibility	CWE-710: Improper Adherence to Coding Standards	PASSED
SW C-1 07	Reentrancy	CWE-841: Improper Enforcement of Behavioral Workflow	PASSED
SW C-1 06	Unprotected SELFDESTRUCT Instruction	CWE-284: Improper Access Control	PASSED

SW C-1 05	Unprotected Ether Withdrawal	CWE-284: Improper Access Control	PASSED
SW C-1 04	Unchecked Call Return Value	CWE-252: Unchecked Return Value	PASSED
SW C-1 03	Floating Pragma	CWE-664: Improper Control of a Resource Through its Lifetime	NOT PASSED
SW C-1 02	Outdated Compiler Version	CWE-937: Using Components with Known Vulnerabilities	PASSED
SW C-1 01	Integer Overflow and Underflow	CWE-682: Incorrect Calculation	PASSED
SW C-1 00	Function Default Visibility	CWE-710: Improper Adherence to Coding Standards	PASSED

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