

**Blockchain Security | Smart Contract Audits | KYC** 

MADE IN GERMANY

# PeaceDao

# Audit

Security Assessment 07. March, 2022

For



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Version	Date	Description
1.0	07. March 2022	<ul><li>Layout project</li><li>Automated-/Manual-Security Testing</li><li>Summary</li></ul>

#### Network

Binance Smart Chain (BEP20)

#### Website

http://www.holdpeace.com/

### **Telegram**

https://t.me/PeaceTonkenChat

#### **Twitter**

https://twitter.com/\_PeaceDao

### **Description**

A war has caused an indelible negative impact on the world economy and people's livelihood, and it has also turned many people in the world into refugees...Such as World War II, which was a global military conflict that lasted from 1939 (even 1931) to 1945. It was also the largest number of civilian deaths on record, with a total death toll of 70 million, making it the deadliest war in human history. We love peace and don't like war, but in this world, the sound of guns, artillery and explosions is far more than the sound of firecrackers and salutes. We against war and dislike it because the days of war are full of artillery fire. A large area of thick smoke is everywhere, which not only pollutes the air and ozone layer, but also makes many people lose their lives, relatives and homes. Looking at the current Ukrainian Russian war, not only many people are wrapped up in clothes, but also the number of refugees in the world has increased again. We aim to call for peace and against war.

### **Project Engagement**

During the Date 2022, **PeaceDao 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.



# **Contract Link**

#### v1.0

https://bscscan.com/address/
 0x056e451a70231bc447d02b056e0783656c35f783#code

# **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 aspossible.
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	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.

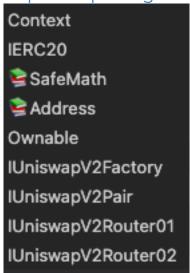
# Methodology

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-byline 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:



#### **Tested Contract Files**

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

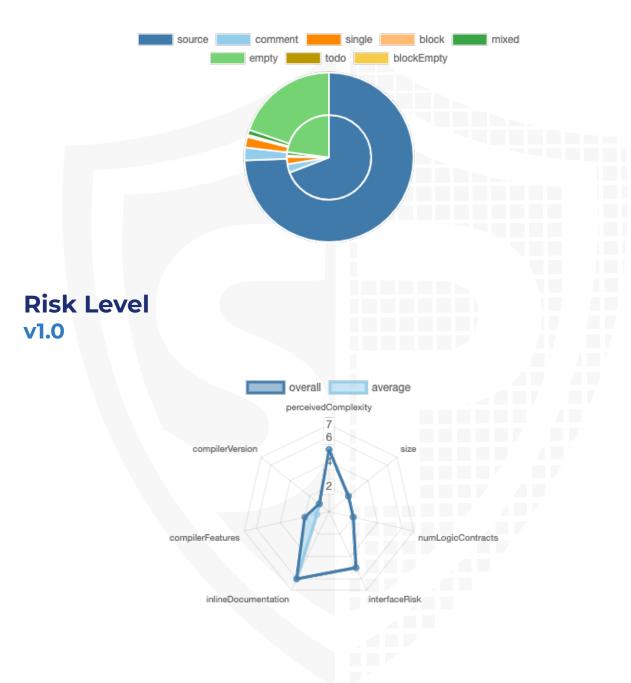
A file with a different Hash has been modified, intentionally or otherwise, after the security review. A different Hash could be (but not necessarily) an indication of a changed condition or potential vulnerability that was not within the scope of this review.

#### **v1.0**

File Name	SHA-1 Hash
contracts/peacedao.sol	be034a24275178a1a256df669e1d9f0d36c3c305

# **Metrics**

# Source Lines v1.0



# **Capabilities**

#### Components

Version	Contracts	Libraries	Interfaces	Abstract
1.0	2	2	5	1

### **Exposed Functions**

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

Ve	rsion	Public	Payable
1.0		99	5

Version	Version External I		Private	Pure View	
1.0	77	86	7	18	35

### **State Variables**

Version	Total	Public
1.0	38	27

# **Capabilities**

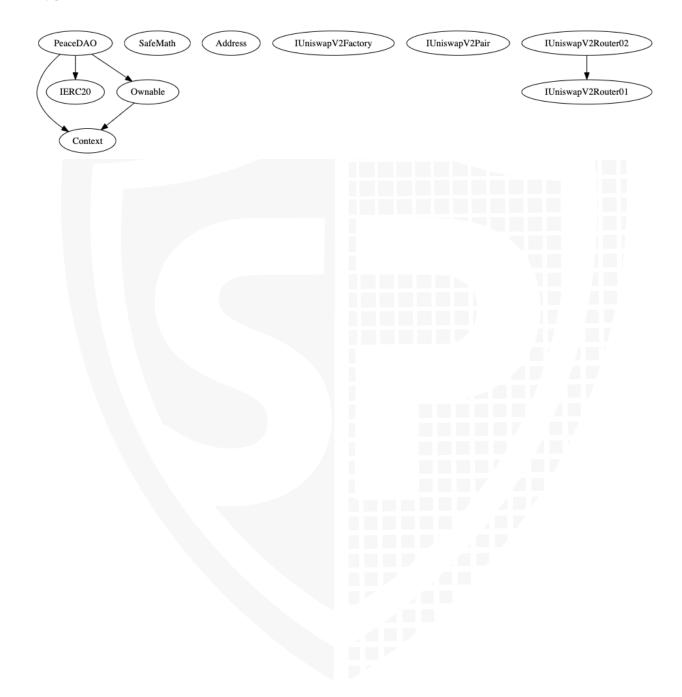
Version	Solidity Versions observed	Experim ental Features	Can Receive Funds	Uses Assembl Y	Has Destroya ble Contract s
1.0	^0.8.4		yes	yes (2 asm blocks)	

Version	Transfer s ETH	Low- Level Calls	Deleg ateCa II	Uses Hash Function s	EC Rec ove r	New/ Create/ Create2	
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1.0	yes			

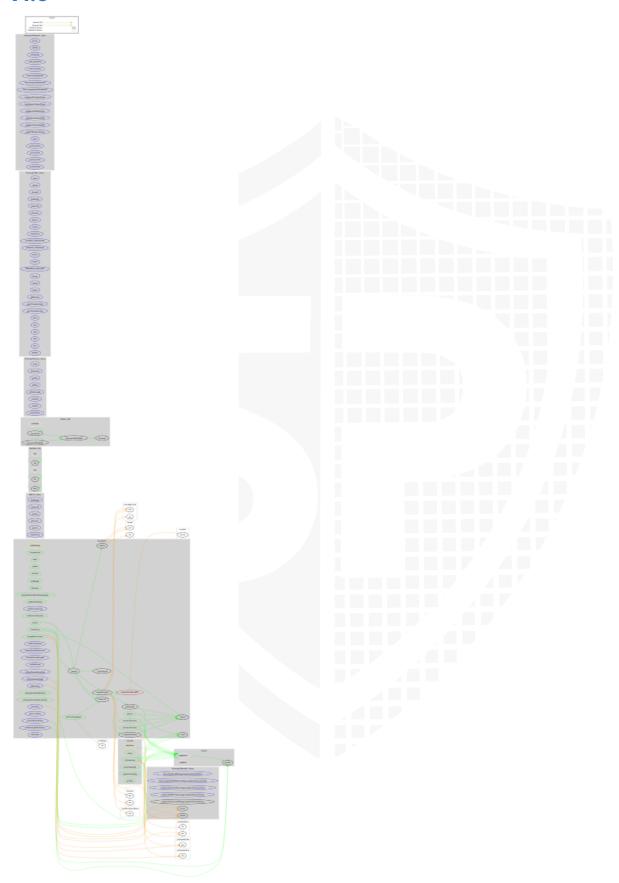
# **Inheritance Graph**

#### 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. Correct implementation of Token standard
- 2. Deployer cannot mint any new tokens
- 3. Deployer cannot burn or lock user funds
- 4. Deployer cannot pause the contract
- 5. Overall checkup (Smart Contract Security)

# **Correct implementation of Token standard**

Function	Description	Exist	Tested	Verified
TotalSupply	provides information about the total token supply	$\checkmark$	$\checkmark$	$\checkmark$
BalanceOf	provides account balance of the owner's account	$\checkmark$	$\checkmark$	$\checkmark$
Transfer	executes transfers of a specified number of tokens to a specified address	<b>√</b>	<b>√</b>	<b>√</b>
TransferFrom	executes transfers of a specified number of tokens from a specified address	<b>√</b>	<b>√</b>	<b>√</b>
Approve	allow a spender to withdraw a set number of tokens from a specified account	<b>√</b>	<b>√</b>	<b>√</b>
Allowance	returns a set number of tokens from a spender to the owner	<b>√</b>	<b>√</b>	$\checkmark$

# Write functions of contract v1.0

24. waiveOwnership

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etingWalletAddress  ExAmount  TokensBeforeSwap  Exes  Example of the state of the s	setPairStatus	
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	erOwnership	

# **Deployer cannot mint any new tokens**

Name	Exist	Tested	Status
Deployer cannot mint	-	_	-
Max / Total Supply		840.0	000.000



### Deployer cannot burn or lock user funds

Name	Exist	Tested	Status
Deployer cannot lock	$\checkmark$	<b>√</b>	X
Deployer cannot burn	-	_	-

#### Comments:

#### **v1.0**

- Deployer can lock user funds by
  - · Blacklisting addresses
  - Setting \_maxTxAmount to 0
  - Setting \_walletMax to 0

### **Deployer cannot pause the contract**

Name	Exist	Tested	Status
Deployer cannot pause	-	_	-



# **Overall checkup (Smart Contract Security)**

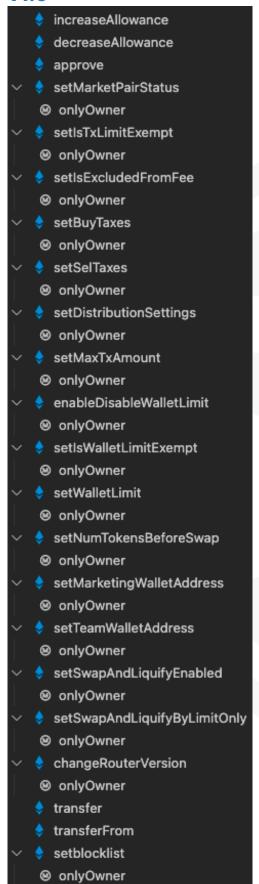


#### Legend

Attribute	Symbol
Verfified / Checked	$\checkmark$
Partly Verified	P
Unverified / Not checked	X
Not available	-

### **Modifiers and public functions**

#### **v1.0**



✓ ♦ waiveOwnership⊗ onlyOwner✓ ♦ transferOwnership⊗ onlyOwner

#### **Comments**

- Deployer can set following state variables without any limitations
  - \_buyLiquidityFee
  - \_buyMarketingFee
  - \_buyTeamFee
  - \_totalTaxIfBuying
  - \_sellLiquidityFee
  - \_sellMarketingFee
  - \_sellTeamFee
  - \_totalTaxIfSelling
  - \_liquidityShare
  - \_marketingShare
  - teamShare
  - \_totalDistributionShares
  - \_maxTxAmount
  - \_walletMax
  - minimumTokensBeforeSwap
- Deployer can enable/disable following state variables
  - isMarketPair
  - isTxLimitExempt
  - isExcludedFromFee
  - checkWalletLimit
  - isWalletLimitExempt
  - swapAndLiquifyEnabled
  - swapAndLiquifyByLimitOnly
  - isbotBlackList
- Deployer can set following addresses
  - marketingWalletAddress
  - teamWalletAddress
  - uniswapPair
  - uniswapV2Router

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

# **Source Units in Scope** v1.0

Туре	File	Logic Contracts	Interfaces	Lines	nLines	nSLOC	Comment Lines	Complex. Score	Capabilities
<b>≥</b> €Q	contracts/peacedao.sol	5	5	786	573	421	20	513	<b>■Š</b> ♣ <del>*</del>
<b>∌</b> ≧Q <b>(</b>	Totals	5	5	786	573	421	20	513	<b>■Š</b> ♣ <del></del> <del></del>

#### Legend

_	
Attribute	Description
Lines	total lines of the source unit
nLines	normalized lines of the source unit (e.g. normalizes functions spanning multiple lines)
nSLOC	normalized 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**

# **AUDIT PASSED**

# **Critical issues**

#### No critical issues

# **High issues**

# No high issues

### **Medium issues**

#### No medium issues

# Low issues

Issue	File	Type	Line	Description
#1	Main	Contract doesn't import npm packages from source (like OpenZeppelin etc.)		We recommend to import all packages from npm directly without flatten the contract. Functions could be modified or can be susceptible to vulnerabilities
#2	Main	A floating pragma is set	6	The current pragma Solidity directive is ""^0.8.4"".
#3	Main	Missing Zero Address Validation (missing- zero-check)	589, 593	Check that the address is not zero
#4	Main	State variable visibility is not set	392, 425	It is best practice to set the visibility of state variables explicitly
#5	Main	Local variables shadowing	525, 502	Rename the local variables that shadow another component

#### Informational issues

Issue	File	Туре	Line	Description
#1	Main	State variables that could be declared constant (constable-states)	143, 142, 386, 384, 385	Add the `constant` attributes to state variables that never change
#2	Main	Functions that are not used	120, 103, 107, 111, 115, 87, 95, 14, 75, 79	Remove unused functions
#3	Main	Unused state variables	143, 142	Remove unused state variables
#4	Main	Misspelling	See description	<ul> <li>Change following words:</li> <li>tokensIntoLiqudity to tokensIntoLiquidity L434</li> <li>setSelTaxes to setSellTaxes L553</li> <li>Make sure to change it everywhere else as well</li> </ul>

#### **Commented Code exist**

There are some instances of code being commented out in the following files that should be removed:

Line	Comment
70	// assert(a == b * c + a % b); $//$ There is no case in which this doesn't hold

#### Recommendation

Remove the commented code, or address them properly.

#### **Audit Comments**

We recommend you to use the special form of comments (NatSpec Format, Follow link for more information <a href="https://docs.soliditylang.org/en/v0.5.10/natspec-format.html">https://docs.soliditylang.org/en/v0.5.10/natspec-format.html</a>) 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.

#### 07. March 2022:

· Read whole report for more information



# **SWC Attacks**

ID	Title	Relationships	Status
<u>SW</u> <u>C-1</u> <u>36</u>	Unencrypted Private Data On-Chain	CWE-767: Access to Critical Private Variable via Public Method	PASSED
<u>SW</u> <u>C-1</u> <u>35</u>	Code With No Effects	CWE-1164: Irrelevant Code	PASSED
<u>SW</u> <u>C-1</u> <u>34</u>	Message call with hardcoded gas amount	CWE-655: Improper Initialization	PASSED
<u>SW</u> <u>C-1</u> <u>33</u>	Hash Collisions With Multiple Variable Length Arguments	CWE-294: Authentication Bypass by Capture-replay	PASSED
<u>SW</u> <u>C-1</u> <u>32</u>	Unexpected Ether balance	CWE-667: Improper Locking	PASSED
<u>SW</u> <u>C-1</u> <u>31</u>	Presence of unused variables	CWE-1164: Irrelevant Code	NOT PASSED
<u>SW</u> <u>C-1</u> <u>30</u>	Right-To-Left- Override control character (U+202E)	CWE-451: User Interface (UI) Misrepresentation of Critical Information	PASSED
<u>SW</u> <u>C-1</u> <u>29</u>	Typographical Error	CWE-480: Use of Incorrect Operator	PASSED
<u>SW</u> <u>C-1</u> <u>28</u>	DoS With Block Gas Limit	CWE-400: Uncontrolled Resource Consumption	PASSED

<u>SW</u> <u>C-1</u> <u>27</u>	Arbitrary Jump with Function Type Variable	CWE-695: Use of Low-Level Functionality	PASSED
<u>SW</u> <u>C-1</u> <u>25</u>	Incorrect Inheritance Order	CWE-696: Incorrect Behavior Order	PASSED
<u>SW</u> 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
<u>SW</u> <u>C-1</u> <u>22</u>	Lack of Proper Signature Verification	CWE-345: Insufficient Verification of Data Authenticity	PASSED
<u>SW</u> <u>C-1</u> <u>21</u>	Missing Protection against Signature Replay Attacks	CWE-347: Improper Verification of Cryptographic Signature	PASSED
<u>SW</u> <u>C-1</u> <u>20</u>	Weak Sources of Randomness from Chain Attributes	CWE-330: Use of Insufficiently Random Values	PASSED
<u>SW</u> <u>C-11</u> <u>9</u>	Shadowing State Variables	CWE-710: Improper Adherence to Coding Standards	NOT PASSED
<u>SW</u> <u>C-11</u> <u>8</u>	Incorrect Constructor Name	CWE-665: Improper Initialization	PASSED
<u>SW</u> <u>C-11</u> <u>7</u>	Signature Malleability	CWE-347: Improper Verification of Cryptographic Signature	PASSED

<u>SW</u> <u>C-11</u> <u>6</u>	Timestamp Dependence	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
<u>SW</u> <u>C-11</u> <u>5</u>	Authorization through tx.origin	CWE-477: Use of Obsolete Function	PASSED
<u>SW</u> <u>C-11</u> <u>4</u>	Transaction Order Dependence	CWE-362: Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition')	PASSED
<u>SW</u> <u>C-11</u> <u>3</u>	DoS with Failed Call	CWE-703: Improper Check or Handling of Exceptional Conditions	PASSED
<u>SW</u> <u>C-11</u> <u>2</u>	Delegatecall to Untrusted Callee	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
<u>SW</u> <u>C-11</u> 1	Use of Deprecated Solidity Functions	CWE-477: Use of Obsolete Function	PASSED
<u>SW</u> <u>C-11</u> <u>O</u>	Assert Violation	CWE-670: Always-Incorrect Control Flow Implementation	PASSED
<u>SW</u> <u>C-1</u> <u>09</u>	Uninitialized Storage Pointer	CWE-824: Access of Uninitialized Pointer	PASSED
<u>SW</u> <u>C-1</u> <u>08</u>	State Variable Default Visibility	CWE-710: Improper Adherence to Coding Standards	NOT PASSED
<u>SW</u> <u>C-1</u> <u>07</u>	Reentrancy	CWE-841: Improper Enforcement of Behavioral Workflow	PASSED
<u>SW</u> <u>C-1</u> <u>06</u>	Unprotected SELFDESTRUC T Instruction	CWE-284: Improper Access Control	PASSED

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



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