

# EndlessWebWorlds Smart Contract Audit Report



05 Nov 2022



# **TABLE OF CONTENTS**

#### Audited Details

- Audited Project
- Blockchain
- Addresses
- Project Website
- Codebase

#### Summary

- Contract Summary
- Audit Findings Summary
- Vulnerabilities Summary

#### Conclusion

#### Audit Results

#### Smart Contract Analysis

- Detected Vulnerabilities

#### **Disclaimer**

#### About Us



# AUDITED DETAILS

### Audited Project

Project name	Token ticker	Blockchain
EndlessWebWorlds	EWW	Ethereum

### Addresses

Contract address         0x3d38F87BeF0123f5764635C7E11048027E0721a8	
Contract deployer address	0xD69EBCcD52F86B2Aa2134D888d821688858a1400

### Project Website

https://endless-web-worlds.com/

### Codebase

https://etherscan.io/address/0x3d38F87BeF0123f5764635C7E11048027E0721a8#code



# SUMMARY

Enter a new way to collaborate and explore. EWW is built on an universe of tiny 2.5D online worlds that anyone can create individually and for free. We are creating a platform where people can easily and amusingly learn about projects or other people. Where teams/clans/holders can meet and have fun with various tool sets that we offer.

### Contract Summary

#### **Documentation Quality**

EndlessWebWorlds provides a very good documentation with standard of solidity base code.

• The technical description is provided clearly and structured and also dont have any high risk issue.

#### **Code Quality**

The Overall quality of the basecode is standard.

 Standard solidity basecode and rules are already followed by EndlessWebWorlds with the discovery of several low issues.

#### **Test Coverage**

Test coverage of the project is 100% (Through Codebase)

#### Audit Findings Summary

- SWC-100 SWC-108 | Explicitly define visibility for all state variables on lines 44, 215, 216, 331, 332, 337, 373, 378, 379 and 380.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 41, 66, 81, 130, 176, 209, 327, 363 and 581.



# CONCLUSION

We have audited the EndlessWebWorlds project released on November 2022 to discover issues and identify potential security vulnerabilities in EndlessWebWorlds Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

The security audit report provides a satisfactory result with some low-risk issues.

The issues found in the EndlessWebWorlds smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues found are some arithmetic operation issues, a floating pragma is set, a state variable visibility is not set. It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code also it is best practice to set the visibility of state variables explicitly. The default visibility for "\_owner" is internal. Other possible visibility settings are public and private.



# AUDIT RESULT

Article	Category	Description	Result	
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.		
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	PASS	
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	the PASS	
Floating Pragma	SWC-103	SWC-103Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.ISS FOU		
Unchecked Call Return Value	SWC-104	104The return value of a message call should be checked.PA		
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.		
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.		
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.		
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.		
Assert Violation	SWC-110 SWC-123	Properly functioning code should never reach a failing assert statement.		
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.		
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.		



DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	PASS
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.	PASS
Incorrect Constructor Name	SWC-118	Constructors are special functions that are called only once during the contract creation.	
Shadowing State Variable	SWC-119	State variables should not be shadowed.	
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.	
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.	
Insufficient Gas Griefing	SWC-126	Insufficient gas griefing attacks can be performed on contracts which accept data and use it in a sub-call on another contract.	
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	



Typographical Error	SWC-129	A typographical error can occur for example when the intent of a defined operation is to sum a number to a variable.	
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	
Unused variables	used variables SWC-131 Unused variables are allowed in Solidity and they do not pose SWC-135 a direct security issue.		PASS
Unexpected Ether balance	SWC-132	2 Contracts can behave erroneously when they strictly assume a specific Ether balance.	
Hash Collisions Variable	SWC-133	Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision.	PASS
Hardcoded gas amount	SWC-134	The transfer() and send() functions forward a fixed amount of 2300 gas.	
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS





# **SMART CONTRACT ANALYSIS**

Started	Friday Nov 04 2022 06:15:24 GMT+0000 (Coordinated Universal Time)		
Finished	Saturday Nov 05 2022 08:44:37 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	EndlessWebWorlds.sol		

### Detected Issues

ID	Title	Severity	Status
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged



SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged



LINE 41

#### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

```
40
41 pragma solidity ^0.8.7;
42
43 abstract contract Ownable {
44 address _owner;
45
```





LINE 66

#### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

```
65
66 pragma solidity ^0.8.7;
67
68 interface IUniswapV2Factory {
69 function createPair(address tokenA, address tokenB)
70
```





LINE 81

#### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

#### Locations

80
81 pragma solidity ^0.8.7;
82
83 interface IUniswapV2Router02 {
84 function swapExactTokensForETH(
85



**LINE 130** 

#### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

#### Locations

129
130 pragma solidity ^0.8.7;
131
132
133 contract DoubleSwapped {
134



**LINE 176** 

#### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

```
175
176 pragma solidity ^0.8.7;
177
178 interface IERC20 {
179 function totalSupply() external view returns (uint256);
180
```



**LINE 209** 

#### **IOW SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

#### Locations

208
209 pragma solidity ^0.8.7;
210
211
212 abstract contract ERC20 is IERC20 {
213



**LINE 327** 

#### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

#### Locations

326
327 pragma solidity ^0.8.7;
328
329
330 abstract contract MaxWalletDynamic {
331



**LINE 363** 

#### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

#### Locations

362
363 pragma solidity ^0.8.7;
364
365 abstract contract TradableErc20 is ERC20, DoubleSwapped, Ownable, Withdrawable {
366 IUniswapV2Router02 internal constant \_uniswapV2Router =
367



LINE 581

#### **Iow SEVERITY**

The current pragma Solidity directive is ""^0.8.7"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- EndlessWebWorlds.sol

#### Locations

580
581 pragma solidity ^0.8.7;
582
583
584 struct AirdropData {
585



C

### SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

LINE 44

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "\_owner" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

```
43 abstract contract Ownable {
44 address _owner;
45
46 modifier onlyOwner() {
47 require(msg.sender == _owner);
48
```



### SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

**LINE 215** 

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "\_name" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

```
214 uint8 constant _decimals = 9;
215 string _name;
216 string _symbol;
217 mapping(address => uint256) internal _balances;
218 mapping(address => mapping(address => uint256)) internal _allowances;
219
```



LINE 216

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "\_symbol" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

```
215 string _name;
216 string _symbol;
217 mapping(address => uint256) internal _balances;
218 mapping(address => mapping(address => uint256)) internal _allowances;
219 uint256 internal constant INFINITY_ALLOWANCE = 2**256 - 1;
220
```



**LINE 331** 

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "startMaxWallet" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

#### Locations

330 abstract contract MaxWalletDynamic {
331 uint256 startMaxWallet;
332 uint256 startTime; // last increment time
333 uint256 constant startMaxBuyPercentil = 5; // maximum buy on start 1000=100%
334 uint256 constant maxBuyIncrementMinutesTimer = 2; // increment maxbuy minutes
335



**LINE 332** 

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "startTime" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

#### Locations

331 uint256 startMaxWallet; 332 uint256 startTime; // last increment time 333 uint256 constant startMaxBuyPercentil = 5; // maximum buy on start 1000=100% 334 uint256 constant maxBuyIncrementMinutesTimer = 2; // increment maxbuy minutes 335 uint256 constant maxBuyIncrementPercentil = 3; // increment maxbyu percentil 1000=100% 336



**LINE 337** 

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "maxBuyIncrementValue" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

#### Locations

336 uint256 constant maxIncrements = 1000; // maximum time incrementations 337 uint256 maxBuyIncrementValue; // value for increment maxBuy 338 339 function startMaxWalletDynamic(uint256 totalSupply) internal { 340 startTime = block.timestamp; 341



**LINE 373** 

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "\_isExcludedFromFee" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

```
372 address public extraAddress;
373 mapping(address => bool) _isExcludedFromFee;
374 uint256 public buyFeePpm = 2; // fee in 1/1000
375 uint256 public sellFeePpm = 2; // fee in 1/1000
376 uint256 public thisShare = 410; // in 1/1000
377
```



**LINE 378** 

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "maxWalletStart" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

```
377 uint256 public extraShare = 0; // in 1/1000
378 uint256 maxWalletStart = 5e16;
379 uint256 addMaxWalletPerMinute = 5e16;
380 uint256 tradingStartTime;
381
382
```



**LINE 379** 

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "addMaxWalletPerMinute" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

```
378 uint256 maxWalletStart = 5e16;
379 uint256 addMaxWalletPerMinute = 5e16;
380 uint256 tradingStartTime;
381
382 constructor(string memory name_, string memory symbol_)
383
```



**LINE 380** 

#### **Iow SEVERITY**

It is best practice to set the visibility of state variables explicitly. The default visibility for "tradingStartTime" is internal. Other possible visibility settings are public and private.

#### Source File

- EndlessWebWorlds.sol

```
379 uint256 addMaxWalletPerMinute = 5el6;
380 uint256 tradingStartTime;
381
382 constructor(string memory name_, string memory symbol_)
383 ERC20(name_, symbol_)
384
```



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