

THE TRUTH
Smart Contract
Audit Report





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	
THE TRUTH	UFO	Ethereum	

Addresses

Contract address	0x249e38ea4102d0cf8264d3701f1a0e39c4f2dc3b
Contract deployer address	0x378Ddb6914e32c4D9c0E08881d460eE9c6C73b82

Project Website

https://ufogaming.io/

Codebase

https://etherscan.io/address/0x249e38ea4102d0cf8264d3701f1a0e39c4f2dc3b#code



SUMMARY

UFO Gaming is a pioneering gaming company founded by a team of gaming and crypto enthusiasts with years of experience in these fields; passionate about taking the gaming industry to the next level by unleashing the tremendous potential of blockchain upon it. What sets UFO Gaming apart? Our richly designed games are set in galaxies and dimensions far from our own, with unique in-game assets our players can actually own. The decentralized Dark Metaverse empowers players and entitles them to in-game revenue. Alongside our talented team of in-house designers, developers, and specialists, UFO Gaming is partnering with some of the world's best gaming studios to execute a truly state-of-the-art yet accessible experience for gamers around the world.

Contract Summary

Documentation Quality

THE TRUTH 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 THE TRUTH with the discovery of several low issues.

Test Coverage

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

Audit Findings Summary

- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 296, 314, 335, 362, 363, 382, 383, 405 and 406.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 11, 91, 120, 147, 453, 480 and 501.



CONCLUSION

We have audited THE TRUTH project released on May 2021 to discover issues and identify potential security vulnerabilities in THE TRUTH 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 TRUTH 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, and floating pragma is 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.



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.	ISSUE FOUND	
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	version of the PASS	
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	ISSUE FOUND	
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	PASS	
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.	PASS	
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.	f-destructible while it PASS	
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	PASS	
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.	PASS	
Assert Violation	SWC-110 SWC-123	PAS		
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	ns should never be used. PASS	
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.	
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.	PASS
Incorrect Inheritance Order	SWC-125		PASS
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.	PASS
Unused variables	SWC-131 SWC-135	Unused variables are allowed in Solidity and they do not pose a direct security issue.	
Unexpected Ether balance	SWC-132	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.	
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	Sunday May 02 2021 10:37:51 GMT+0000 (Coordinated Universal Time)		
Finished	Monday May 03 2021 05:44:36 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	StandardERC20.sol		

Detected Issues

ID	Title	Severity	Status
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-=" DISCOVERED	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-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 296

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol

```
require(currentAllowance >= amount, "ERC20: transfer amount exceeds allowance");
approve(sender, _msgSender(), currentAllowance - amount);
return true;
}
return true;
}
```



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 314

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol

```
function increaseAllowance(address spender, uint256 addedValue) public virtual
returns (bool) {
    _approve(_msgSender(), spender, _allowances[_msgSender()][spender] + addedValue);
    return true;
}

return true;
}
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 335

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol

```
334 require(currentAllowance >= subtractedValue, "ERC20: decreased allowance below
zero");
335 _approve(_msgSender(), spender, currentAllowance - subtractedValue);
336
337 return true;
338 }
339
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 362

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol



SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 363

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol

```
__balances[sender] = senderBalance - amount;
363    __balances[recipient] += amount;
364
365    emit Transfer(sender, recipient, amount);
366  }
367
```



SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 382

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol

```
381
382  _totalSupply += amount;
383  _balances[account] += amount;
384  emit Transfer(address(0), account, amount);
385  }
386
```



SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 383

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol

```
382  _totalSupply += amount;
383  _balances[account] += amount;
384  emit Transfer(address(0), account, amount);
385  }
386
387
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 405

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol

```
require(accountBalance >= amount, "ERC20: burn amount exceeds balance");

dos _balances[account] = accountBalance - amount;

dos _totalSupply -= amount;

dos emit Transfer(account, address(0), amount);

dos _totalSupple = amount;

dos _totalSupple =
```



SWC-101 | ARITHMETIC OPERATION "-=" DISCOVERED

LINE 406

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- StandardERC20.sol

```
405   _balances[account] = accountBalance - amount;
406   _totalSupply -= amount;
407
408   emit Transfer(account, address(0), amount);
409  }
410
```



LINE 11

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- StandardERC20.sol

```
10
11 pragma solidity ^0.8.0;
12
13 /**
14 * @dev Interface of the ERC20 standard as defined in the EIP.
15
```



LINE 91

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- StandardERC20.sol

```
90
91 pragma solidity ^0.8.0;
92
93
94 /**
95
```



LINE 120

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- StandardERC20.sol

```
119
120 pragma solidity ^0.8.0;
121
122 /*
123 * @dev Provides information about the current execution context, including the
124
```



LINE 147

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- StandardERC20.sol

```
146
147 pragma solidity ^0.8.0;
148
149
150
151
```



LINE 453

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- StandardERC20.sol

```
452
453 pragma solidity ^0.8.0;
454
455
456 /**
457
```



LINE 480

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- StandardERC20.sol

```
479
480 pragma solidity ^0.8.0;
481
482 interface IPayable {
483 function pay(string memory serviceName) external payable;
484
```



LINE 501

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- StandardERC20.sol

```
500
501 pragma solidity ^0.8.0;
502
503
504
505
```



DISCLAIMER

This report is subject to the terms and conditions (including without limitation, description of services, confidentiality, disclaimer and limitation of liability) set forth in the Services Agreement, or the scope of services, and terms and conditions provided to you ("Customer" or the "Company") in connection with the Agreement. This report provided in connection with the Services set forth in the Agreement shall be used by the Company only to the extent permitted under the terms and conditions set forth in the Agreement. This report may not be transmitted, disclosed, referred to, or relied upon by any person for any purposes, nor may copies be delivered to any other person other than the Company, without Sysfixed's prior written consent in each instance.

This report is not, nor should be considered, an "endorsement" or "disapproval" of any particular project or team. This report is not, nor should be considered, an indication of the economics or value of any "product" or "asset" created by any team or project that contracts Sysfixed to perform a security assessment. This report does not provide any warranty or guarantee regarding the absolute bug-free nature of the technology analyzed, nor do they provide any indication of the technologies proprietors, business, business model, or legal compliance.

This is a limited report on our findings based on our analysis, in accordance with good industry practice as of 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.

This report should not be used in any way to make decisions around investment or involvement with any particular project. This report in no way provides investment advice, nor should be leveraged as investment advice of any sort. This report represents an extensive assessing process intending to help our customers increase the quality of their code while reducing the high level of risk presented by cryptographic tokens and blockchain technology.

This report is provided for information purposes only and on a non-reliance basis and does not constitute investment advice. No one shall have any right to rely on the report or its contents, and Sysfixed and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers, and other representatives) (Sysfixed) owe no duty of care.



ABOUT US

Sysfixed is a blockchain security certification organization established in 2021 with the objective to provide smart contract security services and verify their correctness in blockchain-based protocols. Sysfixed automatically scans for security vulnerabilities in Ethereum and other EVM-based blockchain smart contracts. Sysfixed a comprehensive range of analysis techniques—including static analysis, dynamic analysis, and symbolic execution—can accurately detect security vulnerabilities to provide an in-depth analysis report. With a vibrant ecosystem of world-class integration partners that amplify developer productivity, Sysfixed can be utilized in all phases of your project's lifecycle. Our team of security experts is dedicated to the research and improvement of our tools and techniques used to fortify your code.