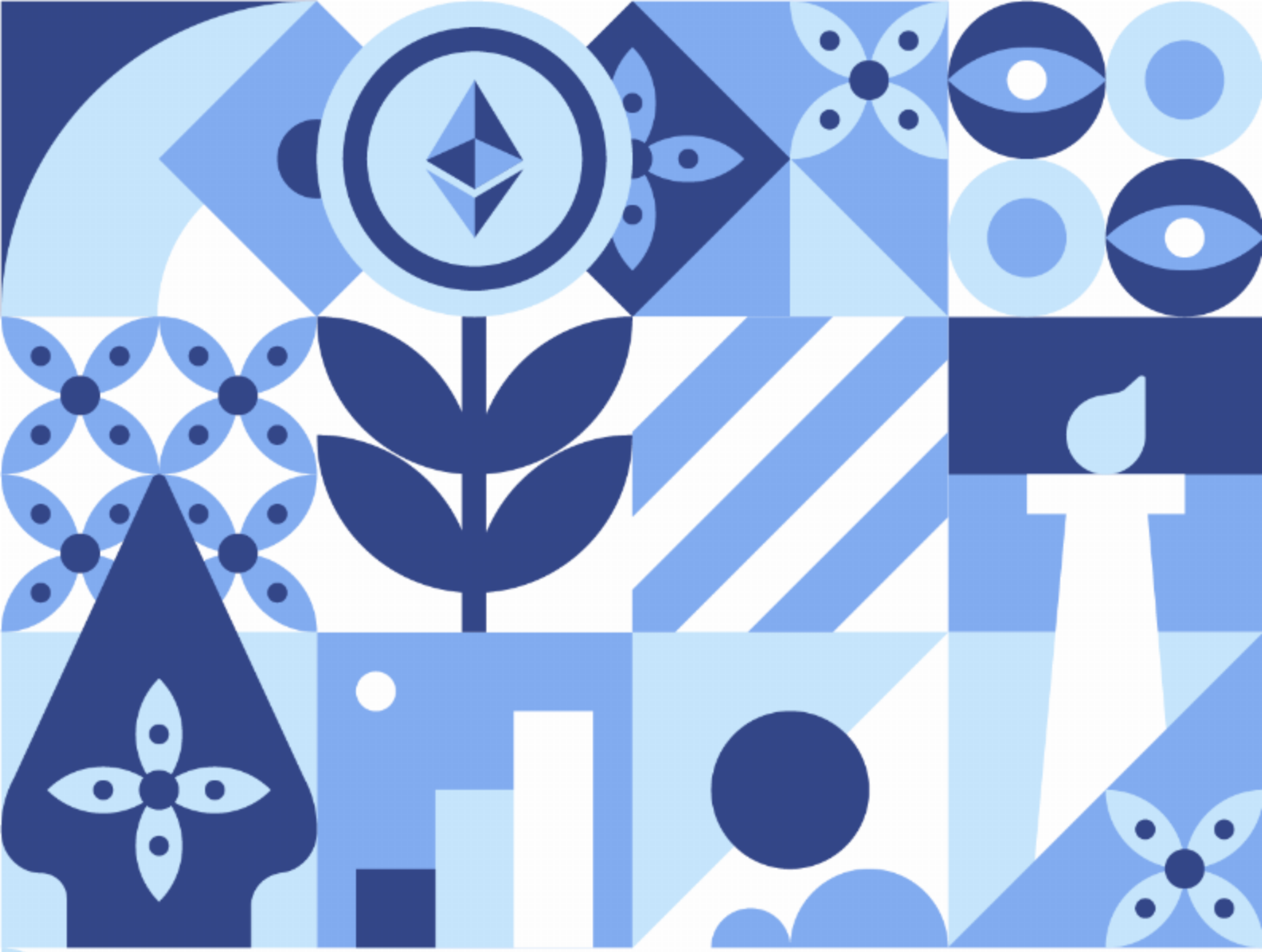

UnoRe

Smart Contract Audit Report

SYSFIXED

27 Apr 2021

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AUDITED DETAILS

Audited Project

Project name	Token ticker	Blockchain
UnoRe	UNO	Ethereum

Addresses

Contract address	0x474021845c4643113458ea4414bdb7fb74a01a77
Contract deployer address	0xb782425E27A88921189a05bE7199748DdbDB71bf

Project Website

https://unore.io/

Codebase

https://etherscan.io/address/0x474021845c4643113458ea4414bdb7fb74a01a77#code

SUMMARY

UnoRe is the world's first insurance and reinsurance trading platform. This platform allows the community to invest and achieve sizable returns from one of the safest asset classes in the world. UnoRe will allow the community to design innovative insurance products, thus propelling a new generation of Insurtech based companies on the UnoRe ecosystem.

Contract Summary

Documentation Quality

UnoRe 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 UnoRe with the discovery of several low issues.

Test Coverage

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

Audit Findings Summary

- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 7, 86, 196, 426, 482, 510, 549, 594, 669, 701 and 742.

CONCLUSION

We have audited the UnoRe project released on April 2021 to discover issues and identify potential security vulnerabilities in UnoRe 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 UnoRe 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 floating pragmas set on several lines. 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.	PASS
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.	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.	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	Properly functioning code should never reach a failing assert statement.	PASS
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	PASS
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS

DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	PASS
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	PASS
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	PASS
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.	PASS
Shadowing State Variable	SWC-119	State variables should not be shadowed.	PASS
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	PASS
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	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/.	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.	PASS
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	PASS

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.	PASS
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.	PASS
Unexpected Ether balance	SWC-132	Contracts can behave erroneously when they strictly assume a specific Ether balance.	PASS
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.	PASS
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS

SMART CONTRACT ANALYSIS

Started	Monday Apr 26 2021 22:03:00 GMT+0000 (Coordinated Universal Time)
Finished	Tuesday Apr 27 2021 11:37:36 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	UnoRe.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
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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.

LINE 7

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
6
7   pragma solidity ^0.5.0;
8
9   /**
10   * @dev Interface of the ERC20 standard as defined in the EIP. Does not include
11
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 86

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
85
86   pragma solidity ^0.5.0;
87
88   /**
89   * @dev Wrappers over Solidity's arithmetic operations with added overflow
90
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 196

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
195
196   pragma solidity ^0.5.0;
197
198
199
200
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 426

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
425
426   pragma solidity ^0.5.0;
427
428
429   /**
430
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 482

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
481
482   pragma solidity ^0.5.0;
483
484
485   /**
486
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 510

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
509
510   pragma solidity ^0.5.0;
511
512   /**
513   * @title Roles
514
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 549

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
548
549   pragma solidity ^0.5.0;
550
551
552   contract PauserRole {
553
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 594

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
593
594   pragma solidity ^0.5.0;
595
596
597   /**
598
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 669

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
668
669   pragma solidity ^0.5.0;
670
671
672
673
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 701

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
700
701   pragma solidity ^0.5.0;
702
703   /**
704   * @dev Contract module that helps prevent reentrant calls to a function.
705
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 742

low SEVERITY

The current pragma Solidity directive is ""^0.5.0"". 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

- UnoRe.sol

Locations

```
741
742   pragma solidity ^0.5.0;
743
744
745
746
```

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