Fenomy

Smart Contract Audit Report

SYSFIXED

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AUDITED DETAILS

Audited Project

Project name	Token ticker	Blockchain
Fenomy	FENOMY	Binance Smart Chain

Addresses

Contract address	0x1e226f8527d9f73048f4b660af44d902d4508bc2
Contract deployer address	0x9Ecfb3452888588cDAD20464dB03a86C4a50f7E5

Project Website

https://fenomy.com/

Codebase

https://bscscan.com/address/0x1e226f8527d9f73048f4b660af44d902d4508bc2#code

SUMMARY

The Fenomy ecosystem has become the base for safety and security management and participant coordination in a series of international events held in a remote wildlife environment with complex terrain covering an area of more than 100,000 square meters. The series' first and most significant event will occur in June 2023. The main trail is more than 1,200 kilometers long, making it one of the world's longest and most difficult extreme races in 2023.

Contract Summary

Documentation Quality

Fenomy 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 Fenomy 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 213, 227, 242, 243, 256, 268, 283, 297, 311, 325, 341, 364, 387 and 413.

CONCLUSION

We have audited the Fenomy project released on December 2022 to discover issues and identify potential security vulnerabilities in Fenomy 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 satisfactory results with low-risk issues.

The issues found in the Fenomy 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. Use Safe Math libraries for arithmetic operations written by OpenZeppalin. if you use solidity ≥ 0.8.0, this is handled by default.

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.	ISSUE FOUND
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.	PASS
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	Friday Dec 31 2021 10:05:31 GMT+0000 (Coordinated Universal Time)
Finished	Saturday Jan 01 2022 06:52:55 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	AntiBotStandardToken.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-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

LINE 213

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
212   unchecked {
213   uint256 c = a + b;
214   if (c < a) return (false, 0);
215   return (true, c);
216   }
217
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 227

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
if (b > a) return (false, 0);
return (true, a - b);
}
}
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 242

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
241   if (a == 0) return (true, 0);
242   uint256 c = a * b;
243   if (c / a != b) return (false, 0);
244   return (true, c);
245   }
246
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 243

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
242   uint256 c = a * b;
243   if (c / a != b) return (false, 0);
244   return (true, c);
245   }
246   }
247
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 256

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
255   if (b == 0) return (false, 0);
256   return (true, a / b);
257   }
258   }
259
260
```

SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 268

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
267    if (b == 0) return (false, 0);
268    return (true, a % b);
269    }
270    }
271
272
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 283

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
282   function add(uint256 a, uint256 b) internal pure returns (uint256) {
283   return a + b;
284   }
285
286   /**
287
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 297

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
296    function sub(uint256 a, uint256 b) internal pure returns (uint256) {
297    return a - b;
298    }
299
300    /**
301
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 311

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
310   function mul(uint256 a, uint256 b) internal pure returns (uint256) {
311   return a * b;
312   }
313
314   /**
315
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 325

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
324   function div(uint256 a, uint256 b) internal pure returns (uint256) {
325   return a / b;
326   }
327
328   /**
329
```

SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 341

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
340   function mod(uint256 a, uint256 b) internal pure returns (uint256) {
341   return a % b;
342   }
343
344   /**
345
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 364

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
363   require(b <= a, errorMessage);
364   return a - b;
365   }
366   }
367
368
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 387

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
386   require(b > 0, errorMessage);
387   return a / b;
388   }
389   }
390
391
```

SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 413

low SEVERITY

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

Source File

- AntiBotStandardToken.sol

Locations

```
412   require(b > 0, errorMessage);
413   return a % b;
414   }
415   }
416   }
417
```

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