

# Assure DeFi<sup>®</sup>

THE VERIFICATION **GOLD STANDARD**



## Security Assessment

### AeoN-X

Date: 27/06/2024

Audit Status: PASS

Audit Edition: Advanced



# Risk Analysis

## Vulnerability summary

Classification	Description
 High	High-level vulnerabilities can result in the loss of assets or manipulation of data.
 Medium	Medium-level vulnerabilities can be challenging to exploit, but they still have a considerable impact on smart contract execution, such as allowing public access to critical functions.
 Low	Low-level vulnerabilities are primarily associated with outdated or unused code snippets that generally do not significantly impact execution, sometimes they can be ignored.
 Informational	Informational vulnerabilities, code style violations, and informational statements do not affect smart contract execution and can typically be disregarded.

## Executive Summary

According to the Assure assessment, the Customer's smart contract is **Well Secured**.



# Scope

## Target Code And Revision

For this audit, we performed research, investigation, and review of the AeoN-X contracts followed by issue reporting, along with mitigation and remediation instructions outlined in this report.

## Target Code And Revision

Project	Assure
Language	Solidity
Codebase	AeoN-X1.sol <a href="#">1e7ce5985709245f3f8d9561703a85a376575d904f5d519e452f016d50228035</a> Deployed at: <a href="https://bscscan.com/address/0xee868feabdc19e5590a9dfaeced7c4798459b48d">https://bscscan.com/address/0xee868feabdc19e5590a9dfaeced7c4798459b48d</a>
Audit Methodology	Static, Manual



# Attacks made to the contract

In order to check for the security of the contract, we tested several attacks in order to make sure that the contract is secure and follows best practices.

Category	Item
Code review & Functional Review	<ul style="list-style-type: none"><li>• Compiler warnings.</li><li>• Race conditions and Reentrancy. Cross-function race conditions.</li><li>• Possible delays in data delivery.</li><li>• Oracle calls.</li><li>• Front running.</li><li>• Timestamp dependence.</li><li>• Integer Overflow and Underflow.</li><li>• DoS with Revert.</li><li>• DoS with block gas limit.</li><li>• Methods execution permissions.</li><li>• Economy model.</li><li>• Private user data leaks.</li><li>• Malicious Event log.</li><li>• Scoping and Declarations.</li><li>• Uninitialized storage pointers.</li><li>• Arithmetic accuracy.</li><li>• Design Logic.</li><li>• Cross-function race conditions.</li><li>• Safe Zeppelin module.</li><li>• Fallback function security.</li><li>• Overpowered functions / Owner privileges</li></ul>

# AUDIT OVERVIEW



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No high severity issues were found.



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No medium severity issues were found.



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No low severity issues were found.



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No Informational severity issues were found.

# Testing coverage

During the testing phase, custom use cases were written to cover all the logic of contracts. *\*Check "Annexes" to see the testing code.*

## AeoN-X token contract tests:

```
tests/test_aeonx.py::test_set_presale_addr RUNNING
Transaction sent: 0x5547db6d602ba33595929a8a53e6e78aa818afc4393be739541208f4dc897027
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 0
METH9.constructor confirmed Block: 1 Gas used: 476546 (3.97%)
METH9 deployed at: 0x3194c80C3dbcd3E11a87892e7bA5c3394048Cc87

Transaction sent: 0x7bae2624e4397b7e8bf657828e1e07435f469ed759872b75091dcfb92e64b42d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 1
UniswapV2Factory.constructor confirmed Block: 2 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0x682C71e40AC47a042Ee7f46E8ae17F94A3bA086

Transaction sent: 0xfe6897b03e1a1a43331440c45f0d3c463a215b9ce3bb912ceff4521bea2b5fc7
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 2
UniswapV2Router02.constructor confirmed Block: 3 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0xE7e06747FaC5360f88a2EFC83E00d25789F69291

Transaction sent: 0x79c9404f9fb3a989655ed5c9d9af15230cc965997e2dcb64beabd326f476dd
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 3
AeoNX.constructor confirmed Block: 4 Gas used: 3840463 (32.00%)
AeoNX deployed at: 0x6951b58d815043E3F842c1b02600Fa888Cc20085

Transaction sent: 0x3e627fa6a03e1c603322f0d4fac985dfdd1518035f3c059a09b9a7e9105071d9
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 0
AeoNX.setPresaleAddress confirmed (Unable: caller is not the owner) Block: 5 Gas used: 22766 (0.19%)

Transaction sent: 0x8779be042f09e219535bec563f80fd7d47dd5a94f77322b45b0c1f6346ca5e32
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 4
AeoNX.setPresaleAddress confirmed Block: 6 Gas used: 45858 (0.38%)

Transaction sent: 0xa764c36736eabd051d5c0a54885ac48c7b1abfc0cf21f7f47bb698c3d3892621
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 5
AeoNX.setPresaleAddress confirmed (The wallet is already excluded!) Block: 7 Gas used: 23694 (0.20%)

tests/test_aeonx.py::test_set_presale_addr PASSED
tests/test_aeonx.py::test_include_in_fee RUNNING
Transaction sent: 0x56c2541f92aa306f1209baae3a840ab2c1dfcc89c2598d908a5bfac69cac914d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 6
METH9.constructor confirmed Block: 8 Gas used: 476546 (3.97%)
METH9 deployed at: 0x9E4c14403d7d9A8A782044E86a93CAE090782ac9

Transaction sent: 0xa631e8c29bda874e2ef287747e0dbfa547e0bc9b053b4c979fc4a8e4d57ae00e
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 7
UniswapV2Factory.constructor confirmed Block: 9 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xcCB53c9429d32594f404d01f0e9E65ED10Cd809

Transaction sent: 0x821ffffde57cb491817defalb492304e3c45333d9e2fal312b7e048819f82c405
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 8
UniswapV2Router02.constructor confirmed Block: 10 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x420b109989eF5baba6092029594eF45E19A044A

Transaction sent: 0xa76f4f57340c9efe8422a23b2ab0efa44b7ad87387f5e97e8caab3604a5c2a32
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 9
AeoNX.constructor confirmed Block: 11 Gas used: 3840475 (32.00%)
AeoNX deployed at: 0xa3853d0Cd2E3fC28e8E130288F2a806d5EE37472

Transaction sent: 0x585d04f67c69a0b11d1b935e13ee6f2059c09a96481c4983fe3776986c4a417
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 1
AeoNX.includeInFee confirmed (Unable: caller is not the owner) Block: 12 Gas used: 22809 (0.19%)

Transaction sent: 0x4a0b2c71a935f2f6e827d705649a0ee3df7d2a3b91d0e51789bcbdc38d54490c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 10
AeoNX.includeInFee confirmed (The wallet is already included!) Block: 13 Gas used: 23737 (0.20%)

Transaction sent: 0x8131b458612295abcb27222ebd38a6c7a32e39598c8da79ef01ffe016e776660
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 11
AeoNX.setPresaleAddress confirmed Block: 14 Gas used: 45858 (0.38%)

Transaction sent: 0x6f867b38c5205058a55457cb65dc51de8d9437f557d238c95d6d41c03fd029b1
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 12
AeoNX.includeInFee confirmed Block: 15 Gas used: 15892 (0.13%)

tests/test_aeonx.py::test_include_in_fee PASSED
```

```

tests/test_aeonx.py::test_set_tokens_to_swap RUNNING
Transaction sent: 0x86ccad7541d8fa6d70fa6cd5d4b73e65798dfefa273572e714cdabe980c81ba
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 13
METH9.constructor confirmed Block: 16 Gas used: 476546 (3.97%)
METH9 deployed at: 0xe692cf21812e882717c4bf647f9768fa58861c8b

Transaction sent: 0xe4579df8e59b85ec97990dbc23ebf018d9a82ee393cada37bec775da2af70ae1
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 14
UniswapV2Factory.constructor confirmed Block: 17 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xe65a7a341978d59d48d30fc23f9014fACB4f575A

Transaction sent: 0x75b6e25066fc484a87b63b4f3e737709de7f948e3ffd358538a867e80cae95a7
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 15
UniswapV2Router02.constructor confirmed Block: 18 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x303758532345801c88c2A012541b09E9Aa53A93d

Transaction sent: 0x613e420d60b1b9fa2b55710b2bd26b7511c287c540389e0bd5f3d4bc859b137b
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 16
AeoNX.constructor confirmed Block: 19 Gas used: 3840465 (32.00%)
AeoNX deployed at: 0x26f153358B1C6a4C08660ebd694a0555A9F1cce3

Transaction sent: 0xf9794d1f51c7bd3b4b0295dd491de908784a863c12432f63215b100078827da6
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 2
AeoNX.setTokensToSwap confirmed (Ownable: caller is not the owner) Block: 20 Gas used: 22552 (0.19%)

Transaction sent: 0x470b8ffaa683be5fb33760c4d10c50573aa625dff084850793ca0fdaec3dacb3
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 17
AeoNX.setTokensToSwap confirmed (You need to enter more than 100 tokens.) Block: 21 Gas used: 22596 (0.19%)

Transaction sent: 0x4e2dd9d8aa8da8f2f419fbba2d9b2aa3dccc2ddalc468c10e3514ee0d178be046
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 18
AeoNX.setTokensToSwap confirmed Block: 22 Gas used: 28546 (0.24%)

tests/test_aeonx.py::test_set_tokens_to_swap PASSED
tests/test_aeonx.py::test_set_swap_liquify RUNNING
Transaction sent: 0x80eeef26a875d0b728aad785a8bdcd281321c69cc6670524944e71d22efdb675c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 19
METH9.constructor confirmed Block: 23 Gas used: 476546 (3.97%)
METH9 deployed at: 0x0ae02e4fe488952cf8bc951771540188647a0146

Transaction sent: 0x31d9df08dbdd497871c1c02e3700ba776af151abee48d1ed13d95fabf7b718a
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 20
UniswapV2Factory.constructor confirmed Block: 24 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xdCF93F11ef216cEC9C07fd31d0801c9b2b39Afb4

Transaction sent: 0x8f830ed8f07da52412cbe3a0112e21a440ac8ee3d6cdadc45bb88df9e5df2de
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 21
UniswapV2Router02.constructor confirmed Block: 25 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x8cb61491F1859f53438918F1A5aFCA542Af90397

Transaction sent: 0xce4efb081f43f417d0e202c3fd8aef6d11c76c6db4cc06af7f54163397ddfb3c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 22
AeoNX.constructor confirmed Block: 26 Gas used: 3840465 (32.00%)
AeoNX deployed at: 0xd22363efee93190f82b52fcd62870bcb920eF658

Transaction sent: 0xd93680aeeb935caa632e6aae30b2492707ad0016a05d94d8522676e96952ec23
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 3
AeoNX.setSwapAndLiquifyEnabled confirmed (Ownable: caller is not the owner) Block: 27 Gas used: 22530 (0.19%)

Transaction sent: 0x9a301baa5c8a8087380c0c1c9a400beebf3442dabdb0c0664e939dba162205f32
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 23
AeoNX.setSwapAndLiquifyEnabled confirmed (Value already set) Block: 28 Gas used: 23475 (0.20%)

Transaction sent: 0x7976ba6ed3a9ca71cfff85525f29fed08e18911083e920142bd8beb2dd396af7
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 24
AeoNX.setSwapAndLiquifyEnabled confirmed Block: 29 Gas used: 15277 (0.13%)

tests/test_aeonx.py::test_set_swap_liquify PASSED

```

```

tests/test_aeonx.py::test_set_marketing_wallet RUNNING
Transaction sent: 0xb4f0eb925f6414d222fc71632977401ba96cb12dfe72f3ba33392f201d77f49d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 25
METH9.constructor confirmed Block: 30 Gas used: 476546 (3.97%)
METH9 deployed at: 0x654f70d8442EA18984FA1A0791147250F7E9336

Transaction sent: 0x2a99cf2a63cb15631203dc34b8210fe6aaddfc4f63edb252c7fc3b099883c125
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 26
UniswapV2Factory.constructor confirmed Block: 31 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xA0e061D042dE86f98583860100d739d20C7eAfC43

Transaction sent: 0xe8458668f2772f232118d6c4ea5a841852067cb0ce919a8a8a28d600ca006ace
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 27
UniswapV2Router02.constructor confirmed Block: 32 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x8326980a6c363C9A7a0036C224Af5821200b3AC6

Transaction sent: 0xa7a1338ce0b734fe89d9551cb0b2ff923d490c757464bfa53055d507de6c41d6
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 28
AeonX.constructor confirmed Block: 33 Gas used: 3840475 (32.00%)
AeonX deployed at: 0xA95916C30979400C7443961330b3892510a2298a

Transaction sent: 0x4ccb5e4ed263ec631b55797f7c933b058dd62bb40b5da5279b621f4dda088c40
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 4
AeonX.setMarketingMallet confirmed (Ownable: caller is not the owner) Block: 34 Gas used: 22776 (0.19%)

Transaction sent: 0x716157c6d52b65c3f51d2a9941c6178a2748f17a2522a2609736dfbf70bd8b71
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 29
AeonX.setMarketingMallet confirmed (setmarketingMallet: ZERO) Block: 35 Gas used: 22589 (0.19%)

Transaction sent: 0x446a4b0454c94f174038a6237ee2e618ec005e19b0d916c0818ec7b1548c0ea9
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 30
AeonX.setMarketingMallet confirmed Block: 36 Gas used: 29644 (0.25%)

tests/test_aeonx.py::test_set_marketing_wallet PASSED
tests/test_aeonx.py::test_set_zero_fee RUNNING
Transaction sent: 0x9c926fa0967078f77d561b73c26da6fee2b96787a4657080270882726385932c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 31
METH9.constructor confirmed Block: 37 Gas used: 476546 (3.97%)
METH9 deployed at: 0x82c83b7f88aef2a099d48690547b6ED28e69C8df

Transaction sent: 0xd7f058d8a133c1d4aac27a15eeb0c53821c41b089c5625189bfe19399e894959
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 32
UniswapV2Factory.constructor confirmed Block: 38 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0x724Ca58E1e6e648FB1E15d7Eec0fe1E5f581c7b0

Transaction sent: 0xb520f3621dd6c078e7d655695bf329616f2f1b437e8c3c2d766b32430d766bfd
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 33
UniswapV2Router02.constructor confirmed Block: 39 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x34b97ffa01dc00C959c5f1176273D0dc3be914C1

Transaction sent: 0x355d932afdbbcb7210eb082524dcaaa752f968a3bcf9af6a8d577896f177df1e
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 34
AeonX.constructor confirmed Block: 40 Gas used: 3840475 (32.00%)
AeonX deployed at: 0xc830Ad2F0fC2f368fE50eC93b10c72ecA8b3691

Transaction sent: 0xc22e009449e7a49b24713a600ed326674d9427815b7ac0d2e63af04c18a5f8d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 5
AeonX.setZeroFee confirmed (Ownable: caller is not the owner) Block: 41 Gas used: 22284 (0.19%)

Transaction sent: 0x3685bef83d1d01e88b5d814ff4ba24217885d35140c303683a439f31c81a53ea
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 35
AeonX.setZeroFee confirmed Block: 42 Gas used: 18387 (0.15%)

Transaction sent: 0xc3ae7deabd25a1a951cd129061e7343050f4b02d45fac78b219820c3d82d1ed9
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 36
AeonX.setZeroFee confirmed (Sell Fee is already 0%) Block: 43 Gas used: 23119 (0.19%)

tests/test_aeonx.py::test set zero fee PASSED

```



```
tests/test_aeonx.py::test_transfer RUNNING
Transaction sent: 0x32c6f627f16346b7a0ca7b314c560df8da1e834b3ee9bf04cf68468eac7018a7
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 37
METH9.constructor confirmed Block: 44 Gas used: 476546 (3.97%)
METH9 deployed at: 0x480fccc53589c1f185835db88b8315a0b0f9a3e0

Transaction sent: 0x7dc2a993683b22a48e8d1af2b5b5044e34873a68fea8e1cec497b8b0711bcc0
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 38
UniswapV2Factory.constructor confirmed Block: 45 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xFE0F4Cf8185c0a6Fd65a610FD9488F33aE9095c8

Transaction sent: 0x715f753bbfca31e8d4a869d3f7a0fa73abd556d51e815e1cd08196b5dcb9b0fd
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 39
UniswapV2Router02.constructor confirmed Block: 46 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x4e3E7dC9084dA78E8f017f4C36153A61341736d4

Transaction sent: 0x507bd73dfc9728491f5f8c76b545b0972139a99ad4ec2e675d3e9550b7df2065
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 40
UniswapV2AddLiquidity.constructor confirmed Block: 47 Gas used: 449853 (3.75%)
UniswapV2AddLiquidity deployed at: 0x0AC45e945A00803fc19da8f591be8601C1F63130

Transaction sent: 0xe8b8388244dc89f18d20cc410265e6c62c22040dbec381eee600936cb8bce1
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 41
AeonX.constructor confirmed Block: 48 Gas used: 3840475 (32.00%)
AeonX deployed at: 0x5847798CE8c89e3Fff59AE5fA308EC0d406b5687

Transaction sent: 0x61b863e751bd5d5334f03b57c3638426a2013636218cd04c36e621babf91634c
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 0
AeonX.transfer confirmed (ERC20: transfer from the zero address) Block: 49 Gas used: 22236 (0.19%)

Transaction sent: 0x41e74d3cf5c78b93fc309307cca98a6920f2eeb3cedde3533fb1fa3alc44ab75
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 42
AeonX.transfer confirmed (ERC20: transfer to the zero address) Block: 50 Gas used: 22831 (0.18%)

Transaction sent: 0x79e32e60c983ac01273b52b3718018b945b91ad81396195c017519671f73a633
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 43
AeonX.transfer confirmed (Transfer amount must be greater than zero) Block: 51 Gas used: 22222 (0.19%)

Transaction sent: 0x140b3e09d7a953a832231ae0083e3393eda0c2a6d36aae95131f79d65e10425f
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 44
AeonX.transfer confirmed (ERC20: transfer amount exceeds balance) Block: 52 Gas used: 23231 (0.19%)

Transaction sent: 0x1e28e4fb9428f642b1015c31a06751fb1d252d1e963a4d21b2e50d133a5fe815
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 45
AeonX.transfer confirmed Block: 53 Gas used: 56728 (0.47%)

Transaction sent: 0xf7dafd663c2c2f89e01601696fb242c682867220db612a5e9546c5400alc6b93
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 6
AeonX.transfer confirmed Block: 54 Gas used: 57681 (0.48%)

Transaction sent: 0x328b2b070fe9aa2146b2720107d582b9876f888f8720fa7a151638b90655f974
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 7
AeonX.transfer confirmed Block: 55 Gas used: 103205 (0.86%)

Transaction sent: 0xa7c151a43bd75697f4d1ce29b0ee0b70500311762381e13737b8e2da9c4bbebe
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 1
AeonX.transfer confirmed Block: 56 Gas used: 58228 (0.49%)

tests/test_aeonx.py::test_transfer PASSED
```

# Annexes

Testing code:

**Testing\_AeoN-X\_token:**

```
from brownie import (
    reverts, accounts
)

from scripts.helpful_scripts import (
    ZERO_ADDRESS,
    DAY_TIMESTAMP,
    get_account,
    increase_timestamp
)

from scripts.deploy import (
    deploy_weth,
    deploy_factory,
    deploy_router,
    deploy_liquidity,
    deploy_AeoN-X
)

def test_set_presale_addr(only_Local):
    # Arrange

    owner = get_account(0)

    other = get_account(1)
```

```
weth = deploy_weth(owner)

factory = deploy_factory(owner, owner)

router = deploy_router(owner, factory.address, weth.address)

token = deploy_AeoN-X(owner, router.address)
```

```
with reverts("Ownable: caller is not the owner"):
    token.setPresaleAddress(other, {"from": other})

token.setPresaleAddress(other, {"from": owner})

with reverts("The wallet is already excluded!"):
    token.setPresaleAddress(other, {"from": owner})
```

```
def test_include_in_fee(only_local):
```

```
    # Arrange
```

```
    owner = get_account(0)
```

```
    other = get_account(1)
```

```
    weth = deploy_weth(owner)
```

```
    factory = deploy_factory(owner, owner)
```

```
    router = deploy_router(owner, factory.address, weth.address)
```

```
    token = deploy_AeoN-X(owner, router.address)
```

```
    with reverts("Ownable: caller is not the owner"):
```

```
        token.includeInFee(other, {"from": other})
```

```
    with reverts("The wallet is already included!"):
```

```
        token.includeInFee(other, {"from": owner})
```

```
    token.setPresaleAddress(other, {"from": owner})
```

```
    token.includeInFee(other, {"from": owner})
```

```

def test_set_tokens_to_swap(only_Local):

    # Arrange

    owner = get_account(0)

    other = get_account(1)


    weth = deploy_weth(owner)

    factory = deploy_factory(owner, owner)

    router = deploy_router(owner, factory.address, weth.address)

    token = deploy_AeoN-X(owner, router.address)


    with reverts("Ownable: caller is not the owner"):

        token.setTokensToSwap(101e18, {"from": other})

    with reverts("You need to enter more than 100 tokens."):

        token.setTokensToSwap(10e18, {"from": owner})

    token.setTokensToSwap(101e18, {"from": owner})


def test_set_swap_liquify(only_Local):

    # Arrange

    owner = get_account(0)

    other = get_account(1)


    weth = deploy_weth(owner)

    factory = deploy_factory(owner, owner)

    router = deploy_router(owner, factory.address, weth.address)

    token = deploy_AeoN-X(owner, router.address)


    with reverts("Ownable: caller is not the owner"):

        token.setSwapAndLiquifyEnabled(False, {"from": other})

```

```
with reverts("Value already set"):

    token.setSwapAndLiquifyEnabled(True, {"from": owner})

token.setSwapAndLiquifyEnabled(False, {"from": owner})
```

```
def test_set_marketing_wallet(only_local):

    # Arrange

    owner = get_account(0)

    other = get_account(1)

    extra = get_account(2)

    weth = deploy_weth(owner)

    factory = deploy_factory(owner, owner)

    router = deploy_router(owner, factory.address, weth.address)

    token = deploy_AeoN-X(owner, router.address)

    with reverts("Ownable: caller is not the owner"):

        token.setMarketingWallet(extra, {"from": other})

    with reverts("setmarketingWallet: ZERO"):

        token.setMarketingWallet(ZERO_ADDRESS, {"from": owner})

    token.setMarketingWallet(extra, {"from": owner})

def test_set_zero_fee(only_local):

    # Arrange

    owner = get_account(0)

    other = get_account(1)

    extra = get_account(2)

    weth = deploy_weth(owner)
```



```

factory = deploy_factory(owner, owner)

router = deploy_router(owner, factory.address, weth.address)

token = deploy_AeoN-X(owner, router.address)


with reverts("Ownable: caller is not the owner"):

    token.setZeroFee({"from": other})

token.setZeroFee({"from": owner})

with reverts("Sell Fee is already 0%"):

    token.setZeroFee({"from": owner})


def test_transfer(only_Local):

    # Arrange

    owner = get_account(0)

    other = get_account(1)

    extra = get_account(2)

    tax_recv = get_account(3)


    weth = deploy_weth(owner)

    factory = deploy_factory(owner, owner)

    router = deploy_router(owner, factory.address, weth.address)

    liquidity = deploy_liquidity(owner, factory.address, router.address)

    token = deploy_AeoN-X(owner, router.address)


    with reverts("ERC20: transfer from the zero address"):

        token.transfer(other, 1e18, {"from": ZERO_ADDRESS})

    with reverts("ERC20: transfer to the zero address"):

        token.transfer(ZERO_ADDRESS, 1e18, {"from": owner})

    with reverts("Transfer amount must be greater than zero"):

```

```
token.transfer(other, 0, {"from": owner})

with reverts("ERC20: transfer amount exceeds balance"):

    token.transfer(other, 87000000e18, {"from": owner})

pair_addr = token.uniswapV2Pair()

tx = token.transfer(other, 5e18, {"from": owner})
assert tx.events['Transfer'][0]['from'] == owner
assert tx.events['Transfer'][0]['to'] == other
assert tx.events['Transfer'][0]['value'] == 5e18

tx = token.transfer(extra, 1e18, {"from": other})
assert tx.events['Transfer'][0]['from'] == other
assert tx.events['Transfer'][0]['to'] == extra
assert tx.events['Transfer'][0]['value'] == 1e18

# Sell

tx = token.transfer(pair_addr, 2e18, {"from": other})
assert tx.events['Transfer'][1]['from'] == other
assert tx.events['Transfer'][1]['to'] == pair_addr
assert tx.events['Transfer'][1]['value'] == 1.94e18

# Buy

tx = token.transfer(extra, 1e18, {"from": pair_addr})
assert tx.events['Transfer'][1]['from'] == pair_addr
assert tx.events['Transfer'][1]['to'] == extra
assert tx.events['Transfer'][1]['value'] == 0.98e18
```

# Technical Findings Summary

## Findings

Vulnerability Level	Total	Pending	Not Apply	Acknowledged	Partially Fixed	Fixed
<div><div></div>High</div>	0					
<div><div></div>Medium</div>	0					
<div><div></div>Low</div>	0					
<div><div></div>Informational</div>	0					

# Assessment Results

## Score Results

Review	Score
Global Score	95/100
Assure KYC	<a href="https://www.assuredefi.com/projects/aeon-x/">https://www.assuredefi.com/projects/aeon-x/</a>
Audit Score	90/100

The Following Score System Has been Added to this page to help understand the value of the audit, the maximum score is 100, however to attain that value the project must pass and provide all the data needed for the assessment. Our Passing Score has been changed to 84 Points for a higher standard, if a project does not attain 85% is an automatic failure. Read our notes and final assessment below. The Global Score is a combination of the evaluations obtained between having or not having KYC and the type of contract audited together with its manual audit.

## Audit PASS

Following our comprehensive security audit of the token contract for Aeon-X project, we inform you that the project has met the necessary security standards.

# Disclaimer

Assure Defi has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocating for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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