



# Security Assessment

## **AeoNX**

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Low	Low-level vulnerabilities are primarily associated with outdated or unused code snippets that generally do not significantly impact execution, sometimes they can be ignored.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.** 

Insecure	Poorly Secured	Secured	Well Secured

## Scope

#### **Target Code And Revision**

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

### **Target Code And Revision**

Project	Assure
Language	Solidity
Codebase	AeoNX1.sol 1e7ce5985709245f3f8d9561703a85a376575d9 04f5d519e452f016d50228035
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> <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**



No high severity issues were found.



No medium severity issues were found.



No low severity issues were found.



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.

#### AeoNX token contract tests:

```
tests/test_aeonx.py::test_set_presale_addr RUNNING
Transaction sent: 0x5547db6d602ba33595929a9a53e6e7
    ransaction sent: 0x5547db6d602ba33595929a9a5366678aa818afc4393be73
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 0
METH9.constructor confirmed Block: 1 Gas used: 476546 (3.97%)
METH9 deployed at: 0x3194c80C3dbcd3E11a07892e7bA5c3394048Cc87
Transaction sent: 0x7bac2624e4397b7c8bf657828cle07435f469ad759872b75091dcfb92c64b42d
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 1
UniswapV2Factory.constructor confirmed Block: 2 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0x602C71c40AC47a042Ec7f46E0acc17F94A3bA006
Transaction sent: 0xfe6097b03elala43331440c45f0d3c463a215b9ce3bb9l2ceff452lbea2b5fc7
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 2
UniswapV2Router02.constructor confirmed Block: 3 Gas used: 3895430 (32.46\)
UniswapV2Router02 deployed at: 0xE7e06747FaC5360f88a2EFC03E00d25789F69291
Transaction sent: 0x79c9404f9fb3a989655ed5c9d9af15230cc965997eec2dcb64beabd326f476dd
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 3
AeoNX.constructor confirmed Block: 4 Gas used: 3840463 (32.00%)
AeoNX.deployed at: 0x6951b58d815043E3F842c1b026b0Fa888Cc20085
Transaction sent: 0x3e627fa6a03elc603322f0d4fac985dfdd1518035f3c059a09b9a7e910507ld9
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 0
AeoNX.setPresaleAddress confirmed (Ownable: 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: 0xa764c36736eabd051d5c0a54885ac48c7blabfc0cf21f7f47bb698c3d3892621
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 5
AeoNV.setPresaleAddress confirmed (The wallet is already excluded!) Block: 7 Gas used: 23694 (0.20%)
 tests/test_aeonx.py::test_set_presale_addr PA
tests/test_aeonx.py:test_include_in_fee RLNNING
Transaction sent: 0x56c2541f92aa306f1209baae3a840ab2cldffc89c2598d908a5bfac69cac914d
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 6
METH9.constructor confirmed Block: 8 Gas used: 476546 (3.97%)
METH9 deployed at: 0x9E4c14403d7d9A8A782044E86a93CAE090782ac9
   ransaction sent: 0xa631e8c29bda874e2ef287747e0dbfa547eebc9b053b4c979fc4a8e4d57ae00e
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 7
UniswapV2Factory.constructor confirmed Block: 9 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xcC853c9429d32594F404d01fbe9E65E01DCda809
Transaction sent: 0x821fffde57cb491817defa1b492304e3c45333d9e2fa1312b7e048819f82c405
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 8
UniswapV2Router02.constructor confirmed Block: 10 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x420b109989eF5baba6092029594eF45E19A04A4A
Transaction sent: 0xa76f4f57340c9efe8422a23b2abeefa44b7ad87387f5e97e8caab3604a5c2a32
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 9
AeoNX.constructor confirmed Block: 11 Gas used: 3840475 (32.00%)
AeoNX deployed at: 0xa3853dDcd2E3fC28e8E130288F2a8D8d5EE37472
Transaction sent: 0x585d04f67c69a0b11d1b935e13ee6f2059c09a96481c4983fe37769866c4a417
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 1
AeoNX.includeInFee confirmed (Ownable: caller is not the owner) Block: 12 Gas used: 22809 (0.19%)
Transaction sent: 0x4aeb2c7la935f2f6e827d705649a0ee3df7d2a3b9ld0e51789bcbdc38d94490c
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: 0x8131b458612295abcb27222ebd38a6c7a32e39598c8da79ef01ffe0le6776660
    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 PAS
```

```
tests/test_aeonx.py::test_set_tokens_to_swap RUNNING
Transaction sent: 0x86ccaad7541d8fa6d70fa9cd5ddbf3e65798dfefa273572e714cdabe980c0lba
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 13
METH9.constructor confirmed Block: 16 Gas used: 476546 (3.97%)
METH9 deployed at: 0xe692Cf21812e082717C4bF647F9768Fa58861c8b
 Transaction sent: 0xe4579df8e59b85ec97990dbc23ebf018d9a82ee393cada37bec775da2af70ael
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 14
UniswapV2Factory.constructor confirmed Block: 17 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xe65A7a341978d59d40d30FC23F5014FACB4f575A
 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: 0x613e420d60blb9fc2b55710b2bd26b7511c287c540389e0bd5f3d4bc859b137b
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 16
AecNX.constructor confirmed Block: 19 Gas used: 3840465 (32.00%)
AecNX deployed at: 0x26f15335881C6a4C00660e0d694a0555A9F1cce3
 Transaction sent: 0xf9794d1f51c7bd3b4b0295dd491dd908784a863c12432f63215b100078827da6
Gas price: 0.0 gwel Gas limit: 12000000 Nonce: 2
AeoNX.setTokensToSwap confirmed (Ownable: caller is not the owner) Block: 20 Gas used: 22552 (0.19%)
 Transaction sent: 0x470b8ffaa683be5fb33760c4d10c50573ea625dff084850793ca0fdaec3dacb3
Gas price: 0.0 gwel Gas limit: 12000000 Nonce: 17
AecND.setTokensToSwap confirmed (You need to enter more than 100 tokens.) Block: 21 Gas used: 22596 (0.19%)
 Transaction sent: 0x4e2dd9d0aa6da8f2f419fbba2d9b2aa3dcc2dda1c468c10e3514ee0d178be046
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 18
AeoNX.setTokensToSwap confirmed Block: 22 Gas used: 28546 (0.24%)
tests/test_aeonx.py::test_set_tokens_to_swap PASSE
tests/test_aeonx.py::test_set_swap_liquify RUNNING
 Transaction sent: 0x8eeef268875d0b720aad785a8bdcd281321c69cc6670524944e71d22efdb675c
Gas price: 0.0 gwei Gas Limit: 12000000 Nonce: 19
METH9.constructor confirmed Block: 23 Gas used: 476546 (3.97%)
METH9 deployed at: 0x0ae02e4f6488952cFB8c951771540188647a0146
Transaction sent: 0x3ld9df08dbdddd49787lclc02c3700ba776af15labec48dlcd13d95fabf7b7l8a
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 20
UniswapV2Factory.constructor confirmed Block: 24 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xdCF93F1lcf216cEC9C07fd3ld0801c9b2b39Afb4
 Transaction sent: 0x8f830ed8f07da52412cbe3a0112e21a440ac8eee3d6cdadc45bb88df9e5df2de
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: 0xce4efb081f43f417d0e202c3fd9aeff6d11c76c6db4cc06af7f54163397ddfbc
Gas price: 0.0 guei Gas linit: 12000000 Nonce: 22
AeoNX.constructor confirmed Block: 26 Gas used: 3840465 (32.00%)
AeoNX deployed at: 0x022363efee93190f82b52FCD6287Dbcb920eF658
 Transaction sent: 0xd93680aeeb935caa632e6aae30b2492707ad0816a05d94d8522676e96952ec23
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: 0x9a301baa5c8a8087380cellc9a400beebf3442dabdbc0664e939dba162205f32
     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: 0x7976ba6ed3a9ca71cffb85525f29fed08e18911083e920142bd8beb2dd396af7
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 PAS
```

```
tests/test_aeonx.py::test_set_marketing_wallet RUNNING
Transaction sent: 0xb4f0eb925f6414d222fc71632977401ba96cb12dfe72f3ba33392f201d77f49d
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 25
METH9.constructor confirmed 0lock: 30 Gas used: 476546 (3.97%)
METH9 deployed at: 0x654f70d8442EA18904FA1A079114f7250F7E9336
Transaction sent: 0x2a99cf2a63cb15631203dc34b8210f66aaddfc4f63edb252c7fc3b099883c125
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 26
UniswapV2Factory.constructor confirmed Block: 31 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0x40e061042dE86f90583860100d733d20CFeAfC43
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: 0x8326980ac263C9A7a8036C224Af58212280b3AC6
   ransaction sent: 0xa7a1338ce0b734fe89d9551cb0b2ff923d490c757464bfa53055d507de6c41d6
Gas price: 0.0 gwei Gas Linit: 12000000 Nonce: 28
AccNX.constructor confirmed Block: 33 Gas used: 3840475 (32.00%)
AccNX deployed at: 0xA95916C3D979400C7443961330b3092510a2298a
Transaction sent: 0xa7a1338co
Transaction sent: 0x4ccb5e4ed263ec631b55797f7c933b058dd62bb40b5da5279b621f4dda088c40
Gas price: 0.0 gwel 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
AcoNX.setMarketingMallet confirmed (setmarketingMallet: ZERO) Block: 35 Gas used: 22589 (0.19%)
Transaction sent: 0x446a4b0454c94f174038a6237ee2e618ec605e19b0d916c0818ec7b1548c0ea9
    Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 30
AcoND.setMarketingMallet confirmed Block: 36 Gas used: 29644 (0.25%)
 tests/test_aeonx.py::test_set_marketing_wallet PASSED
tests/test_aeonx.py:itest_set_reng_dete FASSED
tests/test_aeonx.py:itest_set_zero_fee RLNNING
Transaction sent: 0x9:0926fa0957078f77d561b73c26da6fee2b96787a4657080270082726385932c
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 31
WETH9.constructor confirmed Block: 37 Gas used: 476546 (3.97%)
METH9 deployed at: 0x82c83b7f88aef2eD99d48690547b6ED28e69C8df
   ransaction sent: 0xd7f058d8a133cld4aac27e15eeb0c53821c4lb809c5625189bfe19399e894959
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 32
UniswapV2Factory.constructor confirmed Block: 38 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0x724Ca58Ele66648F81E15d7Eec0fe1E5f581c7b0
 fransaction sent: 0xb520f362ldd6c078e7d655695bf3296l6f2f1b437e8c3c2d766b32430d766bfd
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 33
UniswapV2Router02.constructor confirmed Block: 39 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x34b97ffa0ldc00C959c5f117627300de3be914C1
   ransaction sent: 0x355d932afdbbcb7210eb082524dcaea752f960a3bcf9af6a8d577896f177dfle
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 34
AccNX.constructor confirmed Block: 40 Gas used: 3840475 (32.00%)
AccNX deployed at: 0xc830Ad2FDfCC2f368fE5DcC93b1Dc72ecA8b3691
 fransaction sent: 0xc22e009449e7a49b24713a600ed3326674d9427815b7ac0d2e63af04c18a5f0d
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 5
AecNO.setZeroFee confirmed (Ownoble: caller is not the owner) Block: 41 Gas used: 22284 (0.19%)
Transaction sent: 0x3685bef83dld0le88b5d814ff4ba24217885d35140c303683a439f3lc8la53ea
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 35
AeoNX.setZeroFee confirmed Block: 42 Gas used: 18387 (0.15%)
Transaction sent: 0xc3ae7deabd25ala95lcd12906le7343050f4b02d45fac78b219820c3d82dled9
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_transfer RUNNING
Transaction sent: 0x32c6f627f16346b7a0ca7b314c560df8dale834b3ee9bf04cf68468eac7018a7
Gas price: 0.0 gwei Gas Limit: 12000000 Nonce: 37
METH9.constructor confirmed Block: 44 Gas used: 476546 (3.97%)
METH9 deployed at: 0x480FccF53589c1F185835db88b8315a0b8F9a3e0
 Transaction sent: 0x7dc2a993603b22a48e8dlaf2b5b50d4e34873a68bfea8elcec497b8b07llbcc0
    Gas price: 0.0 gwei Gas Linit: 12000000 Nonce: 38
UniswapV2Factory.constructor confirmed Block: 45 Gas used: 2412730 (20.11%)
UniswapV2Factory deployed at: 0xFE0F4(f8185c0a6Fd65a610F09488F33aE9095c8
 Transaction sent: 0x715f753bbfca3le8d4a869d3f7a0fa73abd556d5le815elcdd0196b5dcb9bfed
    Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 39
UniswapV2Router02.constructor confirmed Block: 46 Gas used: 3895430 (32.46%)
UniswapV2Router02 deployed at: 0x4e3E7dC9084dA7BE8f017f4C36153A61341736d4
 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: 0x0AC45c945A00803fc19da8f591be8601C1F63130
Transaction sent: 0xe8b0308244dc89f18d20cc410265eec6e62c22040dbec381eee600936cb8bcel
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 41
AecNZ.constructor confirmed Block: 48 Gas used: 3840475 (32.00%)
AecNZ deployed at: 0x5847798CE8c89e3Fff59AE5fA300EC0d406b5687
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: 0x41e74d3cf5c78b93fc309307cca98a6920f2eeb3cedde3533fb1fa3a1c44ab75
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 42
AeoNX.transfer confirmed (ERC20: transfer to the zero address) Block: 50 Gas used: 22031 (0.18%)
 Transaction sent: 0x79e32e60c983ac01273b52b3718018b945b91ad81398195c017519671f73a633

Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 43

AeoNO.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

AeoNO.transfer confirmed (ERC20: transfer amount exceeds balance) Block: 52 Gas used: 23231 (0.19%)
 Transaction sent: 0x1e28e4fb9428f642b1015c3la06751fb1d252dle963a4d2lb2e50d133a5fe815
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 45
AeoNX.transfer confirmed Block: 53 Gas used: 56728 (0.47%)
Transaction sent: 0xf7dafd663c2c2f89e01601696fb242c682867220db612a5e9546c5400a1c6b93
Gas price: 0.0 gwei Gas linit: 12000000 Nonce: 6
AeoNX.transfer confirmed Block: 54 Gas used: 57681 (0.48%)
 Transaction sent: 0x328b2b070fc9aa2146b2720107d582b9076f888f8720fa7a151638b90655f974
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 7
AeoNX.transfer confirmed Block: 55 Gas used: 103205 (0.86%)
 Transaction sent: 0xa7c151a43bd75697f4d1ce29beee0b70500311762381e13737b8e2da9c4bbebe
Gas price: 0.0 gwei Gas limit: 12000000 Nonce: 1
AeoNX.transfer confirmed Block: 56 Gas used: 58228 (0.494)
tests/test_aeonx.py::test_transfer PASSED
```

#### **Annexes**

Testing code:

#### Testing\_AeoNX\_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_aeonx
def test_set_presale_addr(only_local):
   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 aeonx(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):
   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_aeonx(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):
   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_aeonx(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):
   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_aeonx(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):
   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_aeonx(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):
   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_aeonx(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):
   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_aeonx(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
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
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
High	0					
Medium	0					
Low	0					
Informational	0					

### **Assessment Results**

#### **Score Results**

Review	Score
Global Score	95/100
Assure KYC	https://www.assuredefi.com/projects/aeon-x/
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 AeoNX 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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