



> Smart  
Contract

Audit #

Jun 01  
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# METHODOLOGY

## MAIN TESTS LIST:

- ◆ Best code practices
- ◆ ERC20/BEP20 compliance (if applicable)
- ◆ FA2 compliance (if applicable)
- ◆ Logical bugs
- ◆ General Denial Of Service(DOS)
- ◆ Locked ether
- ◆ Private data leaks
- ◆ Using components with known vulns
- ◆ Weak PRNG
- ◆ Unused vars
- ◆ Unchecked call return method
- ◆ Code with no effects
- ◆ Pool Asset Security (backdoors in the underlying ERC-20)
- ◆ Function visibility
- ◆ Use of deprecated functions
- ◆ Authorization issues
- ◆ Re-entrancy
- ◆ Arithmetic Over/Under Flows
- ◆ Hidden Malicious Code
- ◆ External Contract Referencing
- ◆ Short Address/ Parameter Attack
- ◆ Race Conditions / Front Running
- ◆ Uninitialized Storage Pointers
- ◆ Floating Points and Precision
- ◆ Signatures Replay

# STRUCTURE OF CONTRACT

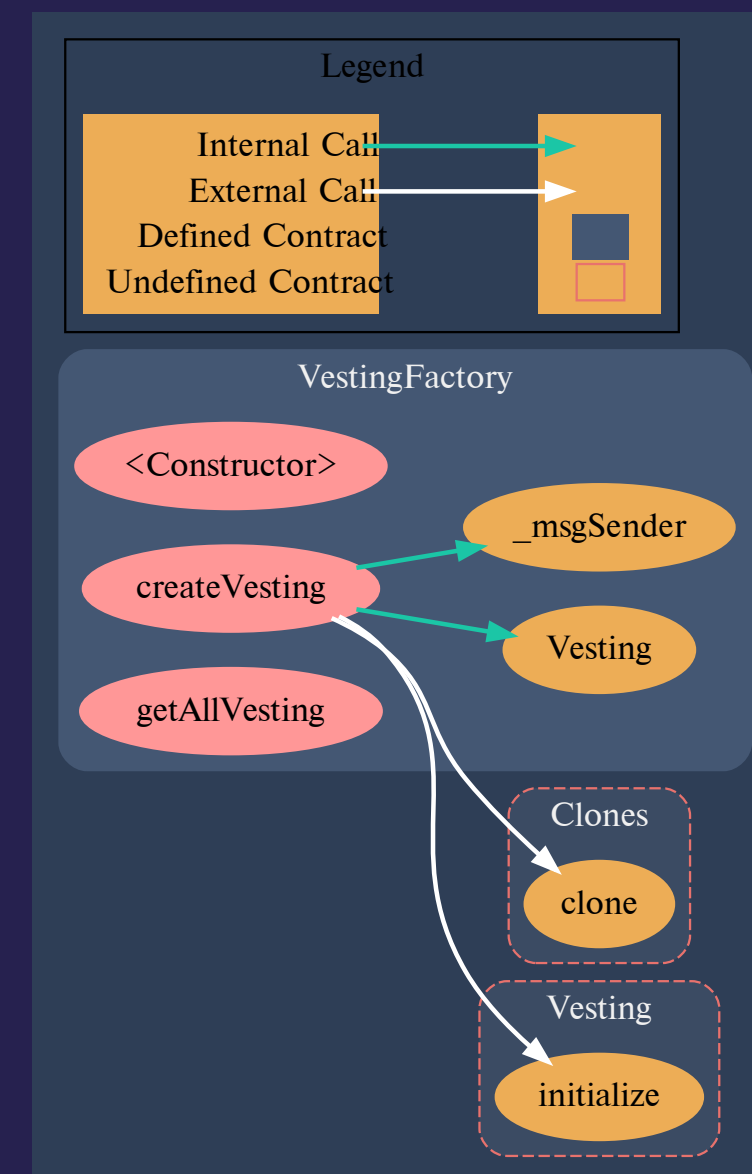
## VESTING.SOL

### CONTRACT METHODS ANALYSIS:

- ◆ initialize(
  - address \_owner,
  - address \_tokenAddress
 )
 

Vulnerabilities not detected
  
- ◆ createStep(
  - Type \_stepType,
  - uint256 \_percent,
  - uint256 \_frequency,
  - uint256 \_time
 )
 

Vulnerabilities not detected



Pic. 1.1  
Vesting.sol

### TOKEN FLOW

◆ `addDepositor(address _depositor, uint256 _amount, uint256 _startTime)`

Vulnerabilities not detected

Tokens in, public

### TOKEN FLOW

◆ `unlock(uint256 _vestingId)`

Vulnerabilities not detected

Tokens out, public

◆ `calculateReward( address _user, uint256 _vestingId, uint256 _frequency, uint256 _paymentCount, uint256 _stepCount )`

Vulnerabilities not detected

◆ `calculateAmount(uint256 _depositorAmount, uint256 _percent)`

Vulnerabilities not detected

### TOKEN FLOW

◆ `claim(uint256 _vestingId)`

Function ignores transfer return value. Recommended to use `safeTransfer` instead

Tokens out, public

◆ `getStep(uint256 _vestingId)`  
Vulnerabilities not detected

◆ `calculatePercent()`  
Vulnerabilities not detected

◆ `getStrategy()`  
Vulnerabilities not detected

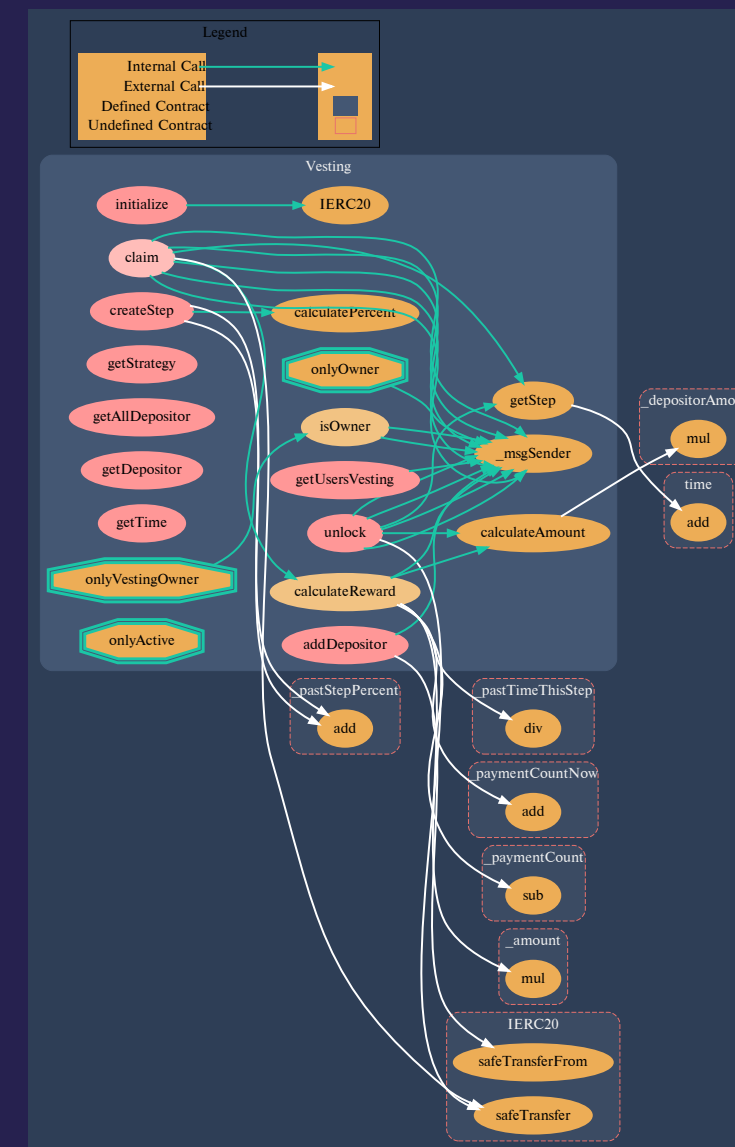
- ◆ `getAllDepositor()`  
Vulnerabilities not detected
- ◆ `getDepositor(uint256 _vestingId)`  
Vulnerabilities not detected
- ◆ `getUsersVesting()`  
Vulnerabilities not detected
- ◆ `getTime()`  
Vulnerabilities not detected
- ◆ `isOwner(uint256 _vestingId)`  
Vulnerabilities not detected

# STRUCTURE OF CONTRACT

## VESTINGFACTORY.SOL

### CONTRACT METHODS ANALYSIS:

- ◆ `createVesting(address _tokenAddress)`  
Vulnerabilities not detected
- ◆ `getAllVesting()`  
Vulnerabilities not detected



Pic. 1.2

VestingFactory.sol



# VERIFICATION CHECK SUMS

**Contract Name****Bytecode hash (SHA 256)**

Vesting.sol

c0b999b6d6da134a5af120f7b5fc21d8f9e41eaf3d0ad54fbf35  
b1dae87d8d20

VestingFactory.sol

07b1c9a3ff0436e8ea402183008f435652b0dd3b9dd708592c  
d16c44bb5d8f2b



# Get In Touch

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