smart state

> Smart
Contract
Audit #

ALGOBLOCKS

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Algoblocks Smart Contract Audit

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

ALGOBLOCKS.SOL

CONTRACT METHODS ANALYSIS:

◆ function generateTokens(
    address[] memory teamAddresses,
    uint256[] memory teamAmounts,
    address[] memory advisorsAddresses,
    uint256[] memory advisorsAmounts,
    address[] memory privateInvestorsAddresses,
    uint256[] memory privateInvestorsAmounts,
    address[] memory strategicInvestorsAddresses,
    uint256[] memory strategicInvestorsAmounts,
    address[] memory idoInvestorsAddresses,
    uint256[] memory idoInvestorsAmounts
)

Vulnerabilities not detected
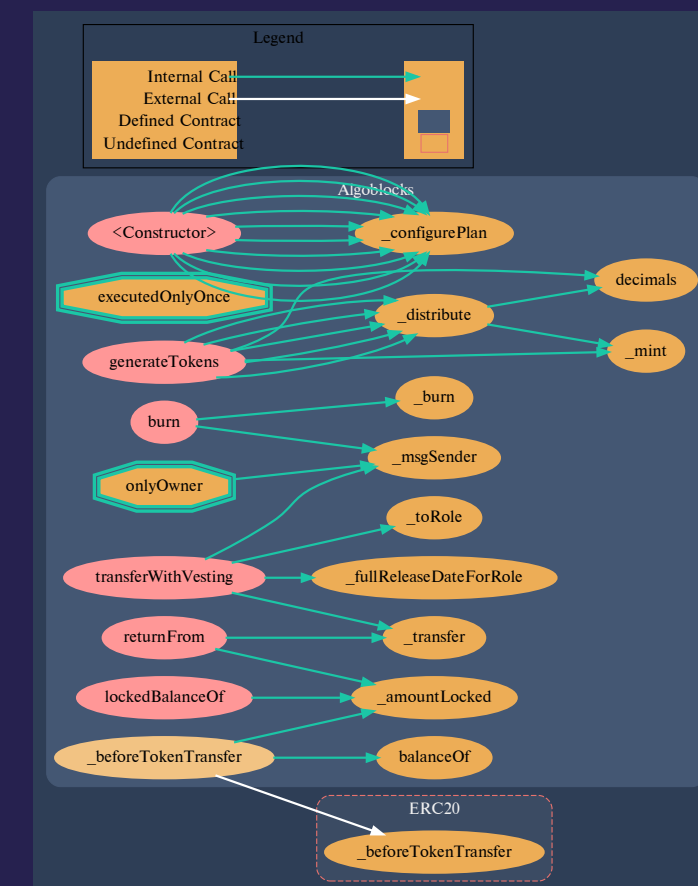
Pic. 1.1
Algoblocks.sol

◆ burn(uint256 amount)
Vulnerabilities not detected

◆ transferWithVesting(address to, uint256 amount, uint role)
Vulnerabilities not detected

◆ _beforeTokenTransfer(
    address from,
    address to,
    uint256 amount
)
Vulnerabilities not detected

◆ _toRole(uint roleId)
Vulnerabilities not detected

◆ _configurePlan(Role role, uint cliff, uint vestingMonths, uint dayOneRelease)
Vulnerabilities not detected

◆ lockedBalanceOf(address account)
Vulnerabilities not detected

◆ returnFrom(address account)
Vulnerabilities not detected

◆ _amountLocked(address account)
Vulnerabilities not detected

◆ _distribute(Role role,
   address[] memory addresses,
   uint256[] memory amounts)
Vulnerabilities not detected

◆ _fullReleaseDateForRole(Role role, address
   account)
Vulnerabilities not detected

STRUCTURE OF CONTRACT

WALLET.SOL

CONTRACT METHODS ANALYSIS:

- ◆ setTokenAddress(address tokenAddress)
  Vulnerabilities not detected

Pic. 1.2
Wallet.sol

Algoblocks Smart Contract Audit

◆ generateTokens(
　　address[] memory teamAddresses,
　　uint256[] memory teamAmounts,
　　address[] memory advisorAddresses,
　　uint256[] memory advisorAmounts,
　　address[] memory
privateInvestorAddresses,
　　uint256[] memory privateInvestorAmounts,
　　address[] memory
strategicInvestorAddresses,
　　uint256[] memory
strategicInvestorAmounts,
　　address[] memory idoInvestorAddresses,
　　uint256[] memory idoInvestorAmounts)
Vulnerabilities not detected

◆ getTransactionCount()
Vulnerabilities not detected

◆ getOperationCount()
Vulnerabilities not detected

◆ getTransaction(uint _txIndex)
Vulnerabilities not detected

◆ submitTransaction(address to, uint value,
Pool pool, uint role)
Vulnerabilities not detected

◆ confirmTransaction(uint txIndex)
Vulnerabilities not detected

◆ revokeTransaction(uint txIndex)
Vulnerabilities not detected

◆ executeTransaction(uint txIndex)
Vulnerabilities not detected

◆ _executeTransaction(uint txIndex)
Vulnerabilities not detected

◆ getOperation(uint _opIndex)
Vulnerabilities not detected

◆ offerAdminRemoval(address admin)
Vulnerabilities not detected

◆ offerNewAdmin(address newAdmin)
Vulnerabilities not detected

◆ requiredConfirmationChangeOffer(uint newRequiredConfirmationCount)
Vulnerabilities not detected

◆ clawback(address account)
Vulnerabilities not detected

◆ confirmOperation(uint opIndex)
Vulnerabilities not detected

◆ revokeOperation(uint opIndex)
Vulnerabilities not detected

◆ executeOperation(uint opIndex)
Vulnerabilities not detected

Algoblocks Smart Contract Audit

◆ availableBalanceFor(Pool pool)
Vulnerabilities not detected

◆ _deductFrom(Pool pool, uint256 amount)
Vulnerabilities not detected

◆ _availableBalance(
    uint256 total,
    uint256 remaining,
    uint cliffPeriod,
    uint vestingCount,
    uint vestingUnit
)
Vulnerabilities not detected

◆ _isAdmin(address account)
Vulnerabilities not detected

◆ _addAdmin(address account)
Vulnerabilities not detected

◆ _removeAdmin(address account)
Vulnerabilities not detected

VERIFICATION CHECK SUMS

Contract Name	Solc version	Optimisation	Bytecode hash (SHA 256)
Algoblocks.sol	0.8.0	200	d43e8c14ec9923b9528d875c3863a24e7a0520411bdd268000772383e42dbc0e
Wallet.sol	0.8.0	200	cb587e2ee350f288adce8093524fbc91652b030ed7baf108ee6451a16d65919d

EXECUTIVE SUMMARY

Based on our understanding of the contract, as well as the nature of the vulnerabilities discovered, their exploitability, and the potential impact we have assessed the level of risk for your organization as **Low**.

Overall security rating: **High**

Get In Touch

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