VITAL BLOCK

Security Assessment

DOCK HIVE

Vital Block Verified on Jan 13th, 2023

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PREPARED FOR:

DOCK HIVE

INTRODUCTION

Auditing Firm	**VITAL BLOCK SECURITY**
Client Firm	DOCKHIVE
Methodology	Automated Analysis, Manual Code Review
Language	Solidity
Contract Address	0x0772898810e9dc42076cc921093932571402feb8
Source Code Light	Verified
Code File	https://github.com/DockHive
Centralization	Active ownership
Compiler Version	v0.8.18+commit.87f61d96
Blockchain	Polygon Network
Website	https://dockhive.io
Discord	https://discord.com/invite/YKrnehVBMp
Twitter	https://twitter.com/dockhive
Doc	https://github.com/DockHive
Prelim Report Date	January 12th 2023
Final Report Date	January 13th 2023

Verify the authenticity of this report on our GitHub Repo: https://www.github.com/vital-block

TABLE OF CONTENTS

Document Properties

Client	DOCK HIVE
Title	Smart Contract Audit Report
Target	DOCK HIVE
Version	1.0
Author	Akhmetshin Marat
Auditors	Akhmetshin Marat, James BK, Ben Partrick
Reviewed by	Dima Meru
Approved by	Prince Mitchell
Classification	Public

Version Info

Version	Date	Author(s)	Description
1.0	January 10, 2024	James BK	Final Release
1.0-AP	January 13, 2024	James BK	Release Candidate

Contact

For more information about this document and its contents, please contact Vital Block Security Inc.

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In the following, we show the specific pull request and the commit hash value used in this audit.

- DockHive INC · GitHub (H90PH590)
- GitHub - DockHive/dht: DockHive Token (DHT) - Native utility token for the DockHive decentralized hosting ecosystem on the Polygon blockchain. (22RTD778)

About Vital Block Security

Vital Block Security provides professional, thorough, fast, and easy-to-understand smart contract security audit. We do in-depth and penetrative static, manual, automated, and intelligent analysis of the smart contract. Some of our automated scans include tools like ConsenSys MythX, Mythril, Slither, Surya. We can audit custom smart contracts, DApps, NFTs, etc (including the service of smart contract auditing). We are reachable at Telegram (https://t.me/vital_block), Twitter (http://twitter.com/Vb_Audit), or Email (info@vitalblock.org).

Table 1.2: Vulnerability Severity Classification

Impact \ Likelihood	*High*	*Medium*	*Low*
High	Critical	High	Medium
Medium	High	Medium	Low
Low	Medium	Low	Low

Methodology

To standardize the evaluation, we define the following terminology based on the OWASP Risk Rating Methodology.

- Likelihood represents how likely a particular vulnerability is to be uncovered and exploited in the wild;
- Impact measures the technical loss and business damage of a successful attack;
- Severity demonstrates the overall criticality of the risk.

SCOPE OF WORK

Vital Block was consulted by DOCK HIVE to conduct the smart contract audit of its. Sol source code. The audit scope of work is strictly limited to the mentioned .Sol file only:

O.DOCKHIVE.sol

ℹ️ **External contracts and/or interfaces dependencies are not checked due to being out of scope.**

Verify audited contract's contract address and deployed link below:

Public Contract Address	
https://polygonscan.com/address/0x0772898810e9dc42076cc921093932571402feb8	
Contract Name	**DOCKHIVE TOKEN**
Ticker	**DHT**
Total Supply	**1,000,000,000**
Decimal	**18**

AUDIT METHODOLOGY

Smart contract audits are conducted using a set of standards and procedures. Mutual collaboration is essential to performing an effective smart contract audit. Here's a brief overview of Vital Block Security auditing process and methodology:

CONNECT

- **The onboarding team gathers source codes, and specifications to make sure we understand the size, and scope of the smart contract audit.**

AUDIT

- **Automated analysis is performed to identify common contract vulnerabilities. We may use the following third-party frameworks and dependencies to perform the automated analysis:**
  - **Remix IDE Developer Tool**
  - **Open Zeppelin Code Analyzer**
  - **SWC Vulnerabilities Registry**
  - **DEX Dependencies, e.g., Pancakeswap, Uniswap**
- **Simulations are performed to identify centralized exploits causing contract and/or trade locks.**
- **A manual line-by-line analysis is performed to identify contract issues and centralized privileges. We may inspect below mentioned common contract vulnerabilities, and centralized exploits:**

Centralized Exploits	○ **Token Supply Manipulation** ○ **Access Control and Authorization** ○ **Assets Manipulation** ○ **Ownership Control** ○ **Liquidity Access** ○ **Stop and Pause Trading** ○ **Ownable Library Verification**

Common Contract Vulnerabilities	○ Integer Overflow ○ Lack of Arbitrary limits ○ Incorrect Inheritance Order ○ Typographical Errors ○ Requirement Violation ○ Gas Optimization ○ Coding Style Violations ○ Re-entrancy ○ Third-Party Dependencies ○ Potential Sandwich Attacks ○ Irrelevant Codes ○ Divide before multiply ○ Conformance to Solidity Naming Guides ○ Compiler Specific Warnings ○ Language Specific Warnings

REPORT

- The auditing team provides a preliminary report specifying all the checks which have been performed and the findings thereof.
- The client's development team reviews the report and makes amendments to the codes.
- The auditing team provides the final comprehensive report with open and unresolved issues.

PUBLISH

- The client may use the audit report internally or disclose it publicly.

ℹ It is important to note that there is no pass or fail in the audit, it is recommended to view the audit as an unbiased assessment of the safety of solidity codes.

Table 1.0 The Full Audit Checklist

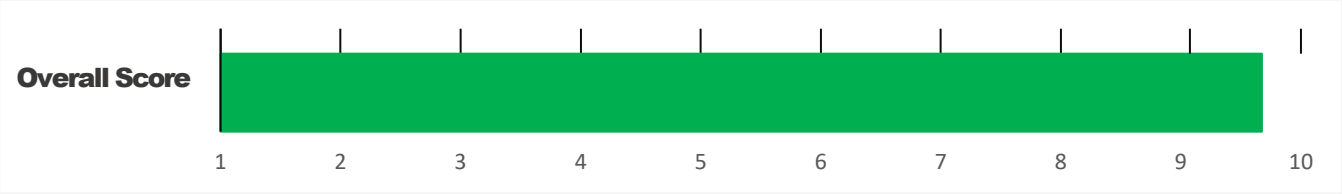
Category	Checklist Items
Basic Coding Bugs	Constructor Mismatch
	Ownership Takeover
	Redundant Fallback Function
	Overflows & Underflows
	Reentrancy
	Money-Giving Bug
	Blackhole
	Unauthorized Self-Destruct
	Revert DoS
	Unchecked External Call
	Gasless Send
	Send Instead Of Transfer
	Costly Loop
	(Unsafe) Use Of Untrusted Libraries
	(Unsafe) Use Of Predictable Variables
	Transaction Ordering Dependence
	Deprecated Uses
Semantic Consistency Checks	Semantic Consistency Checks
Advanced DeFi Scrutiny	Business Logics Review
	Functionality Checks
	Authentication Management
	Access Control & Authorization
	Oracle Security
	Digital Asset Escrow
	Kill-Switch Mechanism
	Operation Trails & Event Generation
	ERC20 Idiosyncrasies Handling
	Frontend-Contract Integration
	Deployment Consistency
	Holistic Risk Management
Additional Recommendations	Avoiding Use of Variadic Byte Array
	Using Fixed Compiler Version
	Making Visibility Level Explicit
	Making Type Inference Explicit
	Adhering To Function Declaration Strictly
	Following Other Best Practices

EXECUTIVE SUMMARY

Vital Block Security has performed the automated and manual analysis of the DOCK HIVE Sol code. The code was reviewed for common contract vulnerabilities and centralized exploits. Here's a quick audit summary:

Status	Critical !	Major "	Medium #	Minor $	Unknown %
Open	0	0	1	3	0
Acknowledged	0	0	1	2	0
Resolved	0	0	0	0	0
Noteworty onlyOwner Privileges	Set Taxes and Ratios, Airdrop, Set Protection Settings, Set Reward Properties, Set Reflector Settings, Set Swap Settings, Set Pair and Router				

DOCK HIVE Smart contract has achieved the following score: 94.0



i Please note that smart contracts deployed on blockchains aren't resistant to exploits, vulnerabilities and/or hacks. Blockchain and cryptography assets utilize new and emerging technologies. These technologies present a high level of ongoing risks. For a detailed understanding of risk severity, source code vulnerability, and audit limitations, kindly review the audit report thoroughly.

i Please note that centralization privileges regardless of their inherited risk status - constitute an elevated impact on smart contract safety and security.

RISK CATEGORIES

Smart contracts are generally designed to hold, approve, and transfer tokens. This makes them very tempting attack targets. A successful external attack may allow the external attacker to directly exploit. A successful centralization-related exploit may allow the privileged role to directly exploit. All risks which are identified in the audit report are categorized here for the reader to review:

Risk Type	Definition
Critical	These risks could be exploited easily and can lead to asset loss, data loss, asset, or data manipulation. They should be fixed right away.
Major	These risks are hard to exploit but very important to fix, they carry an elevated risk of smart contract manipulation, which can lead to high-risk severity.
Medium	These risks should be fixed, as they carry an inherent risk of future exploits, and hacks which may or may not impact the smart contract execution. Low-risk re-entrancy-related vulnerabilities should be fixed to deter exploits.
Minor	These risks do not pose a considerable risk to the contract or those who interact with it. They are code-style violations and deviations from standard practices. They should be highlighted and fixed nonetheless.
Unknown	These risks pose uncertain severity to the contract or those who interact with it. They should be fixed immediately to mitigate the risk uncertainty.

All statuses which are identified in the audit report are categorized here for the reader to review:

Status Type	Definition
Open	Risks are open.
Acknowledged	Risks are acknowledged, but not fixed.
Resolved	Risks are acknowledged and fixed.

CENTRALIZED PRIVILEGES

Centralization risk is the most common cause of cryptography asset loss. When a smart contract has a privileged role, the risk related to centralization is elevated.

There are some well-intended reasons have privileged roles, such as:

- **Privileged roles can be granted the power to** pause() **the contract in case of an external attack.**
- **Privileged roles can use functions like,** include(), **and** exclude() **to add or remove wallets from fees, swap checks, and transaction limits. This is useful to run a presale and to list on an exchange.**

Authorizing privileged roles to externally-owned-account (EOA) is dangerous. Lately, centralization-related losses are increasing in frequency and magnitude.

- **The client can lower centralization-related risks by implementing below mentioned practices:**
- **Privileged role's private key must be carefully secured to avoid any potential hack.**
- **Privileged role should be shared by multi-signature (multi-sig) wallets.**
- **Authorized privilege can be locked in a contract, user voting, or community DAO can be introduced to unlock the privilege.**
- **Renouncing the contract ownership, and privileged roles.**
- **Remove functions with elevated centralization risk.**

ℹ️ **Understand the project's initial asset distribution. Assets in the liquidity pair should be locked. Assets outside the liquidity pair should be locked with a release schedule.**

AUTOMATED ANALYSIS

Symbol	Definition
	Function modifies state
	Function is payable
	Function is internal
	Function is private
	Function is important

DOCK HIVE	Interface			
	└	totalSupply	External		!	NO	
	└	decimals	External		!	NO	
	└	symbol	External		!	NO	
	└	name	External		!	NO	
	└	getOwner	External			NO	
	└	balanceOf	External		!	NO	
	└	transfer	External	"	!		NO	
	└	allowance	External		!	NO	
	└	approve	External		"	!		NO	
	└	transferFrom	External		"		NO	
IFactoryV2	Interface		
	└	getPair	External		NO	
	└	createPair	External		"	NO	
IV2Pair	Interface		
	└	factory	External		NO	
	└	getReserves	External		NO	
	└	sync	External		"	NO	

IRouter01	Interface			
└	factory	External ❗	|NO❗
└	Sol	External ❗		NO❗
└	addLiquidityMATIC	External ❗	#	NO❗
└	addLiquidity	External ❗	" |NO❗
└	swapExactMATICorTokens	External ❗	# |NO❗
└	getAmountsOut	External ❗	|NO❗
└	getAmountsIn	External ❗	|NO❗
IRouter02	Interface	IRouter01		
└	swapExactTokensForMATICSupportingFeeOnTransferTokens	External ❗	" |NO❗
└	swapExactMATICForTokensSupportingFeeOnTransferTokens	External ❗	# |NO❗
└	swapExactTokensForTokensSupportingFeeOnTransferTokens	External ❗	" ! 🛑 |NO❗
└	swapExactTokensForTokens	External ❗	" |NO❗
Protections	Interface			
└	checkUser	External ❗	" ! 🛑 |NO❗
└	setLaunch	External ❗	" |NO❗
└	setLpPair	External ❗	" |NO❗
└	DHT	External ❗	" |NO❗
└	removeSniper	External ❗	" |NO❗
Cashier	Interface			
└	setRewardsProperties	External ❗	" |NO❗
└	tally	External ❗	" |NO❗
└	load	External ❗	# |NO❗
└	cashout	External ❗	" |NO❗
└	giveMeWelfarePlease	External ❗	" |NO❗
└	getTotalDistributed	External ❗	|NO❗
└	getUserInfo	External ❗	|NO❗
└	getUserRealizedRewards	External ❗	|NO❗

| └ | getPendingRewards | External ❗ | | |NO❗ |

| └ | initialize | External ❗ | " | |NO❗ |

| └ | getCurrentReward | External ❗ | | |NO❗ |

||||||

| **SOL** | Implementation | **SafeMath** |||

| └ | <Constructor> | Public ❗ | | # |NO❗ |

| └ | transferOwner | External ❗ | " | | onlyOwner |

| └ | renounceOwnership | External ❗ | " | | NO❗|

| └ | setOperator | Public ❗ | " | |NO❗ |

| └ | renounceOriginalDeployer | External ❗ | " | |NO❗ |

| └ | <Receive MATIC> | External ❗ | | # |NO❗ |

| └ | totalSupply | External ❗ | | |NO❗ |

| └ | decimals | External ❗ | | |NO❗ |

| └ | symbol | External ❗ | | |NO❗ |

| └ | name | External ❗ | | |NO❗ |

| └ | getOwner | External ❗ | | ❗ |NO❗ |

| └ | balanceOf | Public ❗ | | ❗ |NO❗ |

| └ | allowance | External ❗ | | ❗ |NO❗ |

| └ | approve | External ❗ | " | ❗ 🛑 |NO❗ |

| └ | _approve | Internal $ | " 🔒 🛑 | |

| └ | approveContractContingency | Public ❗ | " | ❗ 🛑 | onlyOwner |

| └ | transfer | External ❗ | " | |NO❗ |

| └ | transferFrom | External ❗ | " | |NO❗ |

| └ | setNewRouter | External ❗ | " | | onlyOwner |

| └ | setLpPair | External ❗ | " | | onlyOwner |

| └ | setInitializers | External ❗ | " | | onlyOwner |

| └ | isExcludedFromFees | External ❗ | | |NO❗ |

| └ | isExcludedFromDividends | External ❗ | | |NO❗ |

| └ | isExcludedFromProtection | External ❗ | | |NO❗ |

| └ | setDividendExcluded | Public ❗ | " | | onlyOwner |

| └ | setExcludedFromFees | Public ❗ | " | | onlyOwner |

GZT-02 POSSIBLE OVERFLOW

Category	Severity	Location	Status
Status Mathematical Operations	**Minor**	contracts/code/Dockhive	**Acknowledged**

Description

In **updateForMinter ,** the following equation is used inside an unchecked block

```
function _mint(address account, uint256 amount) internal virtual {
    require(account != address(0), "ERC20: mint to the zero address");

    _beforeTokenTransfer(address(0), account, amount);

    _totalSupply += amount;
    unchecked {
```

Minter can issue more **DHT** tokens indefinitely.
Note that as of the date of publishing, the above review reflects the current understanding of known security patterns as they relate to the DHT contract.

Recommendation

We recommend either checking for overflow in this case, or ensuring that the **PairsIn** is close enough it will never cause an overflow.

BST-02 POSSIBLE OVERFLOW

Category	Severity	Location	Status
Status Mathematical Operations	**Minor**	Contract/Coinflip.move	Acknowledged

Description

In **UpdateforTransfer,** the following equation is used inside an unchecked block

```
function transferFrom(
        address from,
        address to,
        uint256 amount
    ) public virtual override returns (bool) {
        address spender = _msgSender();
        _spendAllowance(from, spender, amount);
        _transfer(from, to, amount);
        return true;
```

The max/min amount of token transferred can be limited (max could be set to 0).

Transfer Amount Limits

Maximum transfer amount: 100% of total supply (1B DHT)
Minimum transfer amount not found.

Recommendation

We recommend either checking for overflow in this case, or ensuring that the Command (AMOUNT) is close enough and will never cause an overflow.

FZT-03 POSSIBLE OVERFLOW

Category	Severity	Location	Status
Inconsistency	**Informational**	Contract/Coinflip.move	Acknowledged

Description

In **updateForBalance** , the following equation is used inside an unchecked block

```
function _transfer(
        address from,
        address to,
        uint256 amount
    ) internal virtual {
        require(from != address(0), "ERC20: transfer from the zero address");
        require(to != address(0), "ERC20: transfer to the zero address");

        _beforeTokenTransfer(from, to, amount);

        uint256 fromBalance = _balances[from];
        require(
            fromBalance >= amount,
            "ERC20: transfer amount exceeds balance"
        );
```

The function Balance () does not have the override specifier. It should be noted that since price0 > a function that overrides only a single interface function does not require the override specifier. However, all other instances of this in the code base contain the override specifier.

Recommendation

We recommend either checking for overflow in this case, or ensuring that the PairsIn is close enough it will never cause an overflow.

OPTIMIZATIONS | DOCK HIVE

ID	Title	Category	Status
FTV	Logarithm Refinement Optimization	Gas Optimization	Acknowledged
FOP	Checks Can Be Performed Earlier	Gas Optimization	Acknowledged
FDP	Unnecessary Use Of SafeMath	Gas Optimization	Acknowledged
FWY	Struct Optimization	Gas Optimization	Acknowledged
FGT	Unused State Variable	Gas Optimization	Acknowledged

General Detectors

Missing Zero Address Validation

Some functions in this contract may not appropriately check for zero addresses being used.

Attention Required

Incorrect Solidity Version

This contract uses an unconventional or very old version of Solidity

Attention Required

- No compiler version inconsistencies found
- No unchecked call responses found
- No vulnerable self-destruct functions found
- No assertion vulnerabilities found
- No old solidity code found
- No external delegated calls found
- No external call dependency found
- No vulnerable authentication calls found
- No invalid character typos found
- No RTL characters found
- No dead code found
- No risky data allocation found
- No uninitialized state variables found
- No uninitialized storage variables found
- No vulnerable initialization functions found
- No risky data handling found
- No number accuracy bug found
- No out-of-range number vulnerability found
- No map data deletion vulnerabilities found
- No tautologies or contradictions found
- No faulty true/false values found
- No innacurate divisions found
- No redundant constructor calls found
- No vulnerable transfers found
- No vulnerable return values found
- No uninitialized local variables found
- No default function responses found
- No missing arithmetic events found
- No missing access control events found
- No redundant true/false comparisons found
- No state variables vulnerable through function calls found
- No buggy low-level calls found
- No expensive loops found
- No bad numeric notation practices found
- No missing constant declarations found
- No missing external function declarations found
- No vulnerable payable functions found
- No vulnerable message values found

Vulnerability Scan

REENTRANCY

No reentrancy risk found

Severity	Minor
Confidence Parameter	Certain

Vulnerability Description

Mintable: An amount of this token can be minted by a private wallet or contract. (Which is normal for major contract utility options)

Scanning Line:

```
 function _mint(address account, uint256 amount) internal
virtual {
        require(account != address(0), "ERC20: mint to
the zero address");

        _beforeTokenTransfer(address(0), account,
amount);

        _totalSupply += amount;
        unchecked {
            // Overflow not possible: balance + amount is
at most totalSupply + amount, which is checked above.
            _balances[account] += amount;
        }
        emit Transfer(address(0), account, amount);

        _afterTokenTransfer(address(0), account, amount);
    }
```

Vulnerability Run check

DockHive Token / DHT
12/01/2024 12:55 AM UTC+8

Contract Info

Total supply	1000000000
Transaction Tax	Buy 0.00% / Sell 0.00%

Risk Analysis

Contract source code verified

This token contract is open source. You can check the contract code for details. Unsourced token contracts are likely to have malicious functions to defraud their users of their assets.

Mint function

The contract may contain additional issuance functions, which could maybe generate a large number of tokens, resulting in significant fluctuations in token prices. It is recommended to confirm with the project team whether it complies with the token issuance instructions.

Owner cant change balance

The contract owner does not have the authority to modify the balance of tokens at other addresses.

No Proxy

There is no proxy in the contract. The proxy contract means contract owner can modify the function of the token and possibly effect the price.

No function to retrieve ownership

If this function exists, it is possible for the project owner to regain ownership even after relinquishing it.

Honeypot Risk

This does not appear to be a honeypot

We are not aware of any code that prevents the sale of tokens.

No Anti Whale

There is no limit to the number of token transactions. The number of scam token transactions may be limited (honeypot risk).

No whitelist function

Whitelist function found

No trading cooldown

The token contract has no trading cooldown function.If there is a trading cooldown function, the user will not be able to sell the token within a certain time or block after buying.

No blacklist function

No blacklist function is included.

Holders

Holder count	1
0xbb...15c0	1000000000.00 (100.00%)

Creator OWNERSHIP NOT RENOUNCED

0x75...9f63	0.00 (0.00%)

Owner

0xbb...15c0	1000000000.00 (100.00%)

Liquidity Pool

Identifier	Definition	Severity
CEN-02	Initial asset distribution	Minor

```
function _burn(address account, uint256 amount) internal virtual {
        require(account != address(0),

        _beforeTokenTransfer(account, address(0), amount);

        uint256 accountBalance = _balances[account];
        require(accountBalance >= amount,
        unchecked {
            _balances[account] = accountBalance - amount;
            // Overflow not possible: amount <= accountBalance <=
totalSupply.
            _totalSupply -= amount;
        }
```

Description:

Floating point calculations can vary across different architectures.

Alleviation:

This exhibit was acknowledged and ultimately discarded by the DOCK HIVE team due to low severity. We consider the exhibit fully attended to as it doesn't impose any meaningful security concerns.

RECOMMENDATION

Project stakeholders should be consulted during the initial asset distribution process.

Contract Owner Address:

https://polygonscan.com/address/0x75c721421ce6d506b0517774bd728b8e58529f63

Audited Files

https://github.com/DockHive

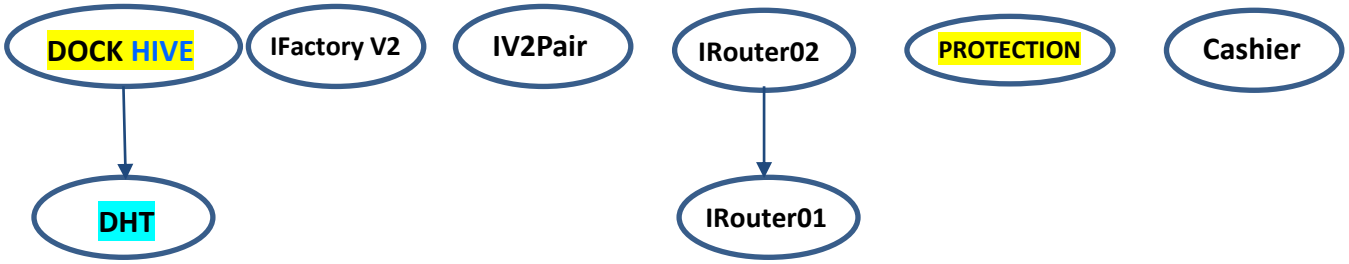
Contracts Creator Hash:

CREATOR TXN HASH
https://polygonscan.com/tx/0x84638787edb1ef7de1ead7a3b9603c0c93530b3d0a2b9549bfb2351d500fa166

Contracts:

Contract
DOCKHIVE 0x0772898810E9dc42076cc921093932571402FEb8

INHERITANCE GRAPH



Identifier	Definition	Severity
CEN-12	Centralization privileges of DOCK HIVE	Medium #

Vulnerability 0 : No important security issue detected.
Threat level: Low

MANUAL REVIEW

DOCK HIVE: DockHive is a cutting-edge platform leveraging blockchain and decentralized networks for secure and scalable Docker container management. Empowering developers and enterprises to optimize applications with efficiency, DockHive sets new standards in container orchestration. Join us for a future-oriented approach to application deployment..

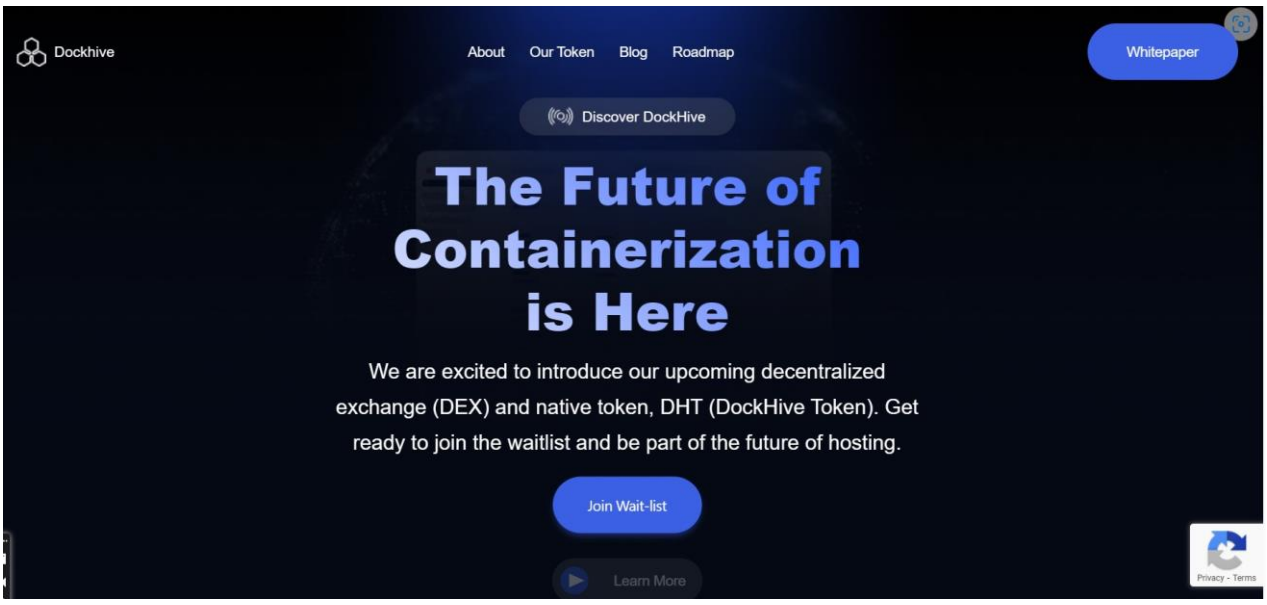
TOKEN NAME: DOCK HIVE

Ticker: DHT

Chain/Standard: POLYGON NETWORK

LAUNGUGE: Solidity

The DOCK HIVE Platform Is Launching On the Polygon Network



ISSUES CHECKING STATUS

	Issue Description	Checking Status
1.	Compiler errors.	PASSED
2.	Race Conditions and reentrancy. Cross-Function Race Conditions.	PASSED
3.	Possible Delay In Data Delivery.	PASSED
4.	Oracle calls.	PASSED
5.	Front Running.	PASSED
6.	Move Dependency.	PASSED
7.	Integer Overflow And Underflow.	PASSED
8.	DoS with Revert.	PASSED
9.	Dos With Block Gas Limit.	PASSED
10.	Methods execution permissions.	PASSED
11.	Economy Model of the contract.	PASSED
12.	The Impact Of Exchange Rate On the sol Logic.	PASSED
13.	Private use data leaks.	PASSED
14.	Malicious Event log.	PASSED
15.	Scoping and Declarations.	PASSED
16.	Uninitialized storage pointers.	PASSED
17.	Arithmetic accuracy.	PASSED
18.	Design Logic.	PASSED
19.	Cross-Function race Conditions	PASSED
20.	Save Upon Move contract Implementation and Usage.	PASSED
21.	Fallback Function Security	PASSED

AUDIT RESULT

PASSED

Identifier	Definition	Severity
CEN-02	Initial asset distribution	Minor

All of the initially minted assets are sent to the contract deployer when deploying the contract. This can be an issue as the deployer and/or contract owner can distribute tokens without consulting the community.

```
contract ERC20 is Context, IERC20, IERC20Metadata {
    mapping(address => uint256) private _balances;

    mapping(address => mapping(address => uint256)) private _allowances;

    uint256 private _totalSupply;

    string private _name;
    string private _symbol;
```

RECOMMENDATION

Project stakeholders should be consulted during the initial asset distribution process.

RECOMMENDATION

Deployer and/or contract owner private keys are secured carefully.

Please refer to PAGE-09 CENTRALIZED PRIVILEGES for a detailed understanding.

ALLEVIATION

The DOCK HIVE project team understands the centralization risk. Some functions are provided privileged access to ensure a good runtime behavior in the project

CERTIFICATE BY VITAL BLOCK SECURITY

Identifier	Definition	Severity
COD-10	Third Party Dependencies	Minor

Smart contract is interacting with third party protocols e.g., Pancakeswap router, cashier contract, protections contract. The scope of the audit treats third party entities as black boxes and assumes their functional correctness. However, in the real world, third parties can be compromised, and exploited. Moreover, upgrades in third parties can create severe impacts, e.g., increased transactional fees, deprecation of previous routers, etc.

RECOMMENDATION

Inspect and validate third party dependencies regularly, and mitigate severe impacts whenever necessary.

DISCLAIMERS

Vital Block provides the easy-to-understand audit of Solidity, Move and Raw source codes (commonly known as smart contracts).

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ABOUT VITAL BLOCK

Vital Block provides intelligent blockchain Security Solutions. We provide solidity and Raw Code Review, testing, and auditing services. We have Partnered with 15+ Crypto Launchpads, audited 50+ smart contracts, and analyzed 200,000+ code lines. We have worked on major public blockchains e.g., Ethereum, Binance, Cronos, Doge, Polygon, Avalanche, Metis, Fantom, Bitcoin Cash, Aptos, Oasis, etc.

Vital Block is Dedicated to Making Defi & Web3 A Safer Place. We are Powered by Security engineers, developers, UI experts, and blockchain enthusiasts. Our team currently consists of 5 core members, and 4+ casual contributors.

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