# KISHIELD

Security Audit

# **UtilityBnb Token**

August 29, 2022



Audit Passed

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# **Audit Summary**

This report has been prepared for UtilityBnb Token on the BSC network. KISHIELD provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Ensuring contract logic meets the specifications and intentions of the client without exposing the user's funds to risk.
- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Thorough line-by-line manual review of the entire codebase by industry experts.





# **Project Overview**

### **Token Summary**

Parameter	Result
Address	0xe1039fe224c7bab9277af8ad5fa3a1c94ebae80c
Name	UtilityBnb
Token Tracker	UtilityBnb (UBNB)
Decimals	9
Supply	50,000,000
Platform	BSC
compiler	v0.7.4+commit.3f05b770
Optimization	Yes with 200 runs
LicenseType	Unlicense
Language	Solidity
Codebase	https://bscscan.com/address/0xe1039fe224c7bab9277af8ad5 fa3a1c94ebae80c#code
Url	https://www.utilicro.com/

#### **Main Contract Assessed**

Name	Contract	Live
UtilityBnb	0xe1039fe224c7bab9277af8ad5fa3a1c94ebae80c	Yes





# **Smart Contract Vulnerability Checks**

Vulnerability	Automatic Scan	Manual Scan	Result
Unencrypted Private Data On-Chain	Complete	Complete	✓ Low / No Risk
Code With No Effects	Complete	Complete	✓ Low / No Risk
Message call with hardcoded gas amount	Complete	Complete	✓ Low / No Risk
Hash Collisions With Multiple Variable Length Arguments	Complete	Complete	✓ Low / No Risk
Unexpected Ether balance	Complete	Complete	✓ Low / No Risk
Presence of unused variables	Complete	Complete	✓ Low / No Risk
Right-To-Left-Override control character (U+202E)	Complete	Complete	<b>⊘</b> Low / No Risk
Typographical Error	Complete	Complete	✓ Low / No Risk
DoS With Block Gas Limit	Complete	Complete	✓ Low / No Risk
Arbitrary Jump with Function Type Variable	Complete	Complete	✓ Low / No Risk
Insufficient Gas Griefing	Complete	Complete	✓ Low / No Risk
Incorrect Inheritance Order	Complete	Complete	✓ Low / No Risk
Write to Arbitrary Storage Location	Complete	Complete	✓ Low / No Risk
Requirement Violation	Complete	Complete	✓ Low / No Risk
Missing Protection against Signature Replay Attacks	Complete	Complete	<b>⊘</b> Low / No Risk
Weak Sources of Randomness from Chain Attributes	Complete	Complete	✓ Low / No Risk





Vulnerability	Automatic Scan	Manual Scan	Result
Authorization through tx.origin	Complete	Complete	✓ Low / No Risk
Delegatecall to Untrusted Callee	Complete	Complete	✓ Low / No Risk
Use of Deprecated Solidity Functions	Complete	Complete	✓ Low / No Risk
Assert Violation	Complete	Complete	✓ Low / No Risk
Reentrancy	Complete	Complete	✓ Low / No Risk
Unprotected SELFDESTRUCT Instruction	Complete	Complete	✓ Low / No Risk
Unprotected Ether Withdrawal	Complete	Complete	✓ Low / No Risk
Unchecked Call Return Value	Complete	Complete	✓ Low / No Risk
Outdated Compiler Version	Complete	Complete	✓ Low / No Risk
Integer Overflow and Underflow	Complete	Complete	✓ Low / No Risk
Function Default Visibility	Complete	Complete	✓ Low / No Risk

# **Contract Ownership**

The contract ownership of UtilityBnb is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address 0x48D9bfcf392306fE95EDf1Cc1dc541Df4440B197 which can be viewed from:

#### **HERE**

The owner wallet has the power to call the functions displayed on the priviliged functions chart below, if the owner wallet is compromised this privileges could be exploited.

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.





# **Important Notes To The Users:**

- The team has been doxxed, has undergone KYC, and is a recognised partner of Photonswap (Cronos Dex), Dexpad, and RadioShack (BSC Dex), all of which have undergone KYC as well.
- The owner cannot mint tokens after intial deployment.
- The owner can change the buy/sell fees amount up to 30%.
- Once the owner renounces ownership of the contract, none of the following are applicable.
- The owner can blacklist wallets.
- The owner can enable/disable Trading.
- The owner can change the max tx amount.
- The owner can change the max wallet amount.
- The owner can add/remove addresses from fees, limits and rewards.
- The owner can change the swapBack settings including enable/disable the swapback and setting the swapThreshold.
- The owner can change the rewards distributor criteria including the minPeriod, minDistribution and distributorGas.
- No high-risk Exploits/Vulnerabilities Were Found in token Source Code other than owner privileges.

## **Audit Passed**







# **Technical Findings Summary**

#### Classification of Issues

#### \*All Issues Found are Informational

Severity	Description
High	Exploits, vulnerabilities or errors that will certainly or probabilistically lead towards loss of funds, control, or impairment of the contract and its functions. Issues under this classification are recommended to be fixed with utmost urgency
Medium	Bugs or issues with that may be subject to exploit, though their impact is somewhat limited. Issues under this classification are recommended to be fixed as soon as possible.
Low	Effects are minimal in isolation and do not pose a significant danger to the project or its users. Issues under this classification are recommended to be fixed nonetheless.
Info	Consistency, syntax or style best practices. Generally pose a negligible level of risk, if any.

### **Findings**

Severity	Found
High	0
Medium	0
Low	0
Info	4
Total	4





# **Findings**

#### Variables could be declared as constant

ID	Severity	Contract	Function
01	<ul><li>Informational</li></ul>	UtilityBnb	Variables dividendsPerShareAccuracyFactor, routerAddress, DEAD, RewardToken, ZERO

#### **Description**

Gas Optimization. Variables that are never changed could be declared as constant.

#### Recommendation

We recommend declaring those variables as constant.

#### Public function that could be declared external

ID	Severity	Contract	Function
02	<ul><li>Informational</li></ul>	UtilityBnb	Functions: authorize, unauthorize, getCirculatingSupply, tradingStatus

#### **Description**

Gas Optimization. Public function that could be declared external

#### Recommendation

Public functions that are never called by the contract should be declared external to save gas.





#### Missing events arithmetic

ID	Severity	Contract	Function
03	<ul><li>Informational</li></ul>	UtilityBnb	Missing events for setDistributionCriteria, changeFees

#### **Description**

Functions that change critical arithmetic parameters should emit an event.

#### Recommendation

Emit corresponding events for critical parameter changes.

#### **Unused Variable**

ID	Severity	Contract	Function
04	Informational	UtilityBnb	Variables swapAndLiquifyByLimitOnlye

#### **Description**

Variables are never used in the contract logic in a meaningful way.

#### Recommendation

We recommend deleting this variable.

### Priviliged Functions (onlyOwner & Others)

Function Name	Parameters	Visibility
authorize	address adr	public
unauthorize	address adr	public
transferOwnership	address adr	public





Function Name	Parameters	Visibility
changeBlacklistedStatus	address holder, bool exempt	external
changeWalletLimit	uint256 newLimit	external
changeRestrictWhales	bool newValue	external
changeIsFeeExempt	address holder, bool exempt	external
changeIsTxLimitExempt	address holder, bool exempt	external
changeIsDividendExempt	address holder, bool exempt	external
changeFees	uint256 newLiqFee, uint256 newRewardFee, uint256 newMarketingFee, uint256 newExtraSellFee	external
changeFeeReceivers	address newLiquidityReceiver, address newMarketingWallet, address newDevWallet	external
changeSwapBackSettings	bool enableSwapBack, uint256 newSwapBackLimit, bool swapByLimitOnly	external
changeDistributionCriteria	uint256 newinPeriod, uint256 newMinDistribution	external
changeDistributorSettings	uint256 gas	external
tradingStatus	bool newStatus	public



# **Statistics**

### **Liquidity Info**

Parameter	Result
Pair Address	Not Deployed Yet
UBNB Reserves	0.00 UBNB
BNB Reserves	0.00 BNB
Liquidity Value	\$0 USD

### Token (UBNB) Holders Info

Parameter	Result
UBNB Percentage Burnt	0.00%
UBNB Amount Burnt	0 UBNB
Top 10 Percentage Own	100.00%
Top 10 Amount Owned	50,000,000 UBNB
Top 10 Aprox Value	\$NaN USD





#### LP (UBNB/BNB) Holders Info

Parameter	Result
UBNB/BNB % Burnt	0.00%
UBNB/BNB Amount Burnt	0 UBNB/BNB
Top 10 Percentage Owned	0.00%
Top 10 Amount Owned	0 UBNB/BNB
Locked Tokens Percentage	0.00%
Locked Tokens Amount	0 UBNB/BNB

<sup>\*</sup> All the data diplayed above was taken on-chain at block 20877887

#### **Liquidity Ownership**

The token does not have liquidity at the moment of the audit, block 20877887







<sup>\*</sup> The tokens on industry-standard burn wallets are not included on the top 10 wallets calculations

#### **Disclaimer**

KISHIELD has conducted an independent audit to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the codes that were provided for the scope of this audit. This audit report does not constitute agreement, acceptance or advocation for the Project that was audited, and users relying on this audit 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 may be pursued by the Project in question, and that 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 completely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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