HoneyBB Token

RugfreeCoins Verified on July 31st, 2023

Overview

✅ No mint function found, the owner cannot mint tokens after initial deployment.

❌ The owner can set a max transaction limit

✅ The owner can't pause trading once it's enabled

❌ The owner can change fees over 20%.

✅ The owner can't blacklist wallets.

✅ The owner can't set a max wallet limit

✅ The owner can't claim the contract's balance of its own token.

❗ HIGH SEVERITY ISSUES

The owner can change swap router address,If owner change this to wrong address selling will stop

```
function setSwapRouter(
    address _swapRouter,
    SwapRouterVersion _version
) external onlyRole(ADMIN_ROLE) {
    require(
        _swapRouter != address(0),
        "Swap router cannot be zero address"
    );
    if (_version == SwapRouterVersion.V3) {
        swapRouterV3 = ISwapRouter(_swapRouter);
    } else {
        swapRouterV2 = IUniswapV2Router02(_swapRouter);
    }
    emit SwapRouterUpdated(_swapRouter, _version);
}
```

The owner can set buy and sell fees up to 100%, the owner can stop trading by setting these values to more than 50%

```
/* ------ CONFIG FUNCTIONS ------ */
function setSellAndBuyTaxRate(
    uint256 _sellAndBuyTaxRate
) external onlyRole(ADMIN_ROLE) {
    require(
        _sellAndBuyTaxRate <= ONE_HUNDRED_PERCENT,
        "Sell and buy tax rate must be less than 100%"
    );
    sellAndBuyTaxRate = _sellAndBuyTaxRate;
    emit SellAndBuyTaxRateUpdated(_sellAndBuyTaxRate);
}
```

The owner can change max tx amount to a very low value, the owner can stop trading by putting this to 1

```solidity
function setMaxAmountPerTx(
    uint256 _maxAmountPerTx
) external onlyRole(ADMIN_ROLE) {
    require(
        _maxAmountPerTx > 0,
        "Max amount per tx must be greater than 0"
    );
    maxAmountPerTx = _maxAmountPerTx;
    emit MaxAmountPerTxUpdated(_maxAmountPerTx);
}
```

Contents

Audit details

Audited project
HoneyBB Token

Contract Address
0x936dF79234533F9A7765841653E2e191441A9Ee2

Client contact
HoneyBB Token Team

Blockchain
Ethereum

Project website
https://honeybb.io/

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – **please make sure to read it in full.**

Background

RugfreeCoins was commissioned by the **HoneyBB Token Team** to perform an audit of the smart contract.

https://etherscan.io/address/0x936df79234533f9a7765841653e2e191441a9ee2

This audit focuses on verifying that the smart contract is secure, resilient, and working according to the specifications.

The information in this report should be used to understand the risk exposure of the smart contract, project feasibility, and long-term sustainability, and as a guide to improving the smart contract's security posture by remediating the identified issues.

Tokenomics

▲ 10% tax when buying & selling (31/07/2023)

10% of trade goes to a private wallet in tokens

Target market and the concept

- Anyone who's interested in the Crypto space with long-term investment plans.
- Anyone who's ready to earn a passive income by holding tokens.
- Anyone who's interested in trading tokens.
- Anyone who's interested in taking part in the HoneyBB token ecosystem.
- Anyone who's interested in taking part in the future plans of HoneyBB Token.
- Anyone who's interested in making financial transactions with any other party using HoneyBB Token as the currency.

Potential to grow with score points

⚡ Project efficiency	**8** / 10
🌟 Project uniqueness	**7** / 10
📊 Information quality	**8** / 10
👌 Service quality	**8** / 10
💻 System quality	**8** / 10
🌍 Impact on the community	**8** / 10
💼 Impact on the business	**9** / 10
🔮 Preparing for the future	**8** / 10
🔒 Smart contract security	**7** / 10
🛠️ Smart contract functionality assessment	**8** / 10
🏆 **Total Score**	**7.9**/ **10**

Contract details

Token contract details for 31st of July 2023

Contract name	**HoneyBB**
Contract address	**0x936dF79234533F9A7765841653E2e191441A9Ee2**
Token supply	**579,000,000,000,000**
Token ticker	**HoneyBB**
Decimals	**18**
Token holders	**3**
Transaction count	**4**
Contract deployer address	**0xF5f59c25064711A3c77583f56dF7A302A6015EcB**
Contract's current owner address	**0xF5f59c25064711A3c77583f56dF7A302A6015EcB**
Private wallet	**0x6521502bdF1983194D4273297bF048676dd066bd**

Contract code function details

Nº	Category	Item	Result
1	Coding conventions	BRC20 Token standards	PASS
		Compile errors	PASS
		Compiler version security	PASS
		Visibility specifiers	PASS
		Gas consumption	PASS
		SafeMath features	PASS
		Fallback usage	PASS
		tx.origin usage	PASS
		Deprecated items	PASS
		Redundant code	PASS
		Overriding variables	PASS
2	Function call audit	Authorization of function call	PASS
		Low level function (call/delegate call) security	PASS
		Returned value security	PASS
		Self destruct function security	PASS
3	Business security & centralisation	Access control of owners	HIGH
		Business logics	HIGH
		Business implementation	PASS
4	Integer overflow/underflow		PASS
5	Reentrancy		PASS
6	Exceptional reachable state		PASS
7	Transaction ordering dependence		PASS
8	Block properties dependence		PASS
9	Pseudo random number generator (PRNG)		PASS
10	DoS (Denial of Service)		PASS
11	Token vesting implementation		PASS
12	Fake deposit		PASS
13	Event security		PASS

Contract description table

The below table represents the summary of the contracts and methods in the token contract. We scanned the whole contract and listed down all the Interfaces, functions, and implementations with their visibility and mutability.

Contract	Type	Bases		
L	Function Name	Visibility	Mutability	Modifiers
HoneyBB	**Implementation**	**ERC20, ERC20 Burnable, AccessControl**		
L		Public ❗	🛑	ERC20
L	setSellAndBuyTaxRate	External ❗	🛑	onlyRole
L	setMaxAmountPerTx	External ❗	🛑	onlyRole
L	antiWhaleSwitch	External ❗	🛑	onlyRole
L	setSellAndBuyTaxRecipient	External ❗	🛑	onlyRole
L	setSwapRouter	External ❗	🛑	onlyRole
L	addTokenPair	External ❗	🛑	onlyRole
L	removeTokenPair	External ❗	🛑	onlyRole
L	setNumberOfTxBeforeSwap	External ❗	🛑	onlyRole
L	_transfer	Internal 🔒	🛑	
L	transferFrom	Public ❗	🛑	NO ❗
L	whichSwapCalled	Private 🔐		
L	swapTokenForEthV2	Private 🔐	🛑	
L	swapTokenForEthV3	Private 🔐	🛑	
L		External ❗	💵	NO ❗
ERC20	**Implementation**	**Context, IERC20, IERC20 Metadata**		
L		Public ❗	🛑	NO ❗

L	name	Public ❗		NO ❗
L	symbol	Public ❗		NO ❗
L	decimals	Public ❗		NO ❗
L	totalSupply	Public ❗		NO ❗
L	balanceOf	Public ❗		NO ❗
L	transfer	Public ❗	🛑	NO ❗
L	allowance	Public ❗		NO ❗
L	approve	Public ❗	🛑	NO ❗
L	transferFrom	Public ❗	🛑	NO ❗
L	increaseAllowance	Public ❗	🛑	NO ❗
L	decreaseAllowance	Public ❗	🛑	NO ❗
L	_transfer	Internal 🔒	🛑	
L	_mint	Internal 🔒	🛑	
L	_burn	Internal 🔒	🛑	
L	_approve	Internal 🔒	🛑	
L	_spendAllowance	Internal 🔒	🛑	
L	_beforeTokenTransfer	Internal 🔒	🛑	
L	_afterTokenTransfer	Internal 🔒	🛑	
IERC20	**Interface**			
L	totalSupply	External ❗		NO ❗
L	balanceOf	External ❗		NO ❗
L	transfer	External ❗	🛑	NO ❗
L	allowance	External ❗		NO ❗
L	approve	External ❗	🛑	NO ❗
L	transferFrom	External ❗	🛑	NO ❗
IERC20Metadata	**Interface**	**IERC20**		
L	name	External ❗		NO ❗

∟	symbol	External ❗		NO ❗
∟	decimals	External ❗		NO ❗
Context	**Implementation**			
∟	_msgSender	Internal 🔒		
∟	_msgData	Internal 🔒		
ERC20Burnable	**Implementation**	**Context, ERC20**		
∟	burn	Public ❗	🛑	NO ❗
∟	burnFrom	Public ❗	🛑	NO ❗
AccessControl	**Implementation**	**Context, IAccessControl, ERC165**		
∟	supportsInterface	Public ❗		NO ❗
∟	hasRole	Public ❗		NO ❗
∟	_checkRole	Internal 🔒		
∟	_checkRole	Internal 🔒		
∟	getRoleAdmin	Public ❗		NO ❗
∟	grantRole	Public ❗	🔴	onlyRole
∟	revokeRole	Public ❗	🔴	onlyRole
∟	renounceRole	Public ❗	🔴	NO ❗
∟	_setupRole	Internal 🔒	🔴	
∟	_setRoleAdmin	Internal 🔒	🔴	
∟	_grantRole	Internal 🔒	🔴	
∟	_revokeRole	Internal 🔒	🔴	
IAccessControl	**Interface**			
∟	hasRole	External ❗		NO ❗
∟	getRoleAdmin	External ❗		NO ❗
∟	grantRole	External ❗	🔴	NO ❗

L	revokeRole	External ❗	🛑	NO ❗
L	renounceRole	External ❗	🛑	NO ❗
ERC165	**Implementation**	**IERC165**		
L	supportsInterface	Public ❗		NO ❗
IERC165	**Interface**			
L	supportsInterface	External ❗		NO ❗
ISwapRouter	**Interface**	**IUniswapV3 SwapCallback**		
L	exactInputSingle	External ❗	💵	NO ❗
L	exactInput	External ❗	💵	NO ❗
L	exactOutputSingle	External ❗	💵	NO ❗
L	exactOutput	External ❗	💵	NO ❗
IUniswapV3 SwapCallback	**Interface**			
L	uniswapV3SwapCallback	External ❗	🛑	NO ❗
IUniswapV2 Router02	**Interface**	**IUniswapV2 Router01**		
L	removeLiquidityETHSupportingFeeOnTransferTokens	External ❗	🛑	NO ❗
L	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External ❗	🛑	NO ❗
L	swapExactTokensForTokensSupportingFeeOnTransferTokens	External ❗	🛑	NO ❗
L	swapExactETHForTokensSupportingFeeOnTransferTokens	External ❗	💵	NO ❗
L	swapExactTokensForETHSupportingFeeOnTransferTokens	External ❗	🛑	NO ❗
IUniswapV2 Router01	**Interface**			
L	factory	External ❗		NO ❗

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L	WETH	External ❗		NO ❗
L	addLiquidity	External ❗	🛑	NO ❗
L	addLiquidityETH	External ❗	💵	NO ❗
L	removeLiquidity	External ❗	🛑	NO ❗
L	removeLiquidityETH	External ❗	🛑	NO ❗
L	removeLiquidityWithPermit	External ❗	🛑	NO ❗
L	removeLiquidityETHWithPermit	External ❗	🛑	NO ❗
L	swapExactTokensForTokens	External ❗	🛑	NO ❗
L	swapTokensForExactTokens	External ❗	🛑	NO ❗
L	swapExactETHForTokens	External ❗	💵	NO ❗
L	swapTokensForExactETH	External ❗	🛑	NO ❗
L	swapExactTokensForETH	External ❗	🛑	NO ❗
L	swapETHForExactTokens	External ❗	💵	NO ❗
L	quote	External ❗		NO ❗
L	getAmountOut	External ❗		NO ❗
L	getAmountIn	External ❗		NO ❗
L	getAmountsOut	External ❗		NO ❗
L	getAmountsIn	External ❗		NO ❗

Legend

Symbol	Meaning
🛑	Function can modify state
💵	Function is payable

Inheritance Hierarchy
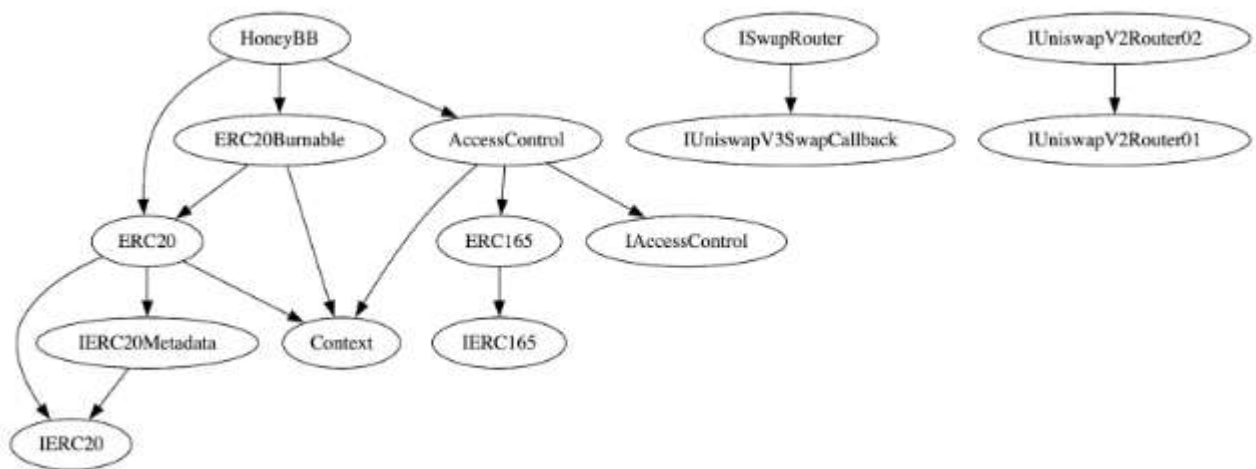
Security issue checking status

❖ High severity issues

The owner can change swap router address,If owner change this to wrong address selling will stop

```solidity
function setSwapRouter(
    address _swapRouter,
    SwapRouterVersion _version
) external onlyRole(ADMIN_ROLE) {
    require(
        _swapRouter != address(0),
        "Swap router cannot be zero address"
    );
    if (_version == SwapRouterVersion.V3) {
        swapRouterV3 = ISwapRouter(_swapRouter);
    } else {
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    }
    emit SwapRouterUpdated(_swapRouter, _version);
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```

The owner can set buy and sell fees up to 100%, the owner can stop trading by setting these values to more than 50%

```solidity
/* ------ CONFIG FUNCTIONS ------ */
function setSellAndBuyTaxRate(
    uint256 _sellAndBuyTaxRate
) external onlyRole(ADMIN_ROLE) {
    require(
        _sellAndBuyTaxRate <= ONE_HUNDRED_PERCENT,
        "Sell and buy tax rate must be less than 100%"
    );
    sellAndBuyTaxRate = _sellAndBuyTaxRate;
    emit SellAndBuyTaxRateUpdated(_sellAndBuyTaxRate);
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```

The owner can change max tx amount to a very low value, the owner can stop trading by putting this to 1

```
function setMaxAmountPerTx(
    uint256 _maxAmountPerTx
) external onlyRole(ADMIN_ROLE) {
    require(
        _maxAmountPerTx > 0,
        "Max amount per tx must be greater than 0"
    );
    maxAmountPerTx = _maxAmountPerTx;
    emit MaxAmountPerTxUpdated(_maxAmountPerTx);
}
```

Wrong logic when checking to buy and sell, to check whether it's a buy or sell, it should check sender or receiver from the pair address or not, currently contract does not take any buy or sell taxes

INFORMED AND FIXED ·

```
/* ------ HELPER FUNCTIONS ------ */
function isUniswapCall() private view returns (bool) {
    return
        msg.sender == address(swapRouterV3) ||
        msg.sender == address(swapRouterV2);
}
```

❖ Medium severity issues

All the taxes are going to a private wallet, not to the contract.

```
function setSellAndBuyTaxRecipient(
    address _sellAndBuyTaxRecipient
) external onlyRole(ADMIN_ROLE) {
    require(
        _sellAndBuyTaxRecipient != address(0),
        "Sell and buy tax recipient cannot be zero address"
    );
    sellAndBuyTaxRecipient = _sellAndBuyTaxRecipient;
    emit SellAndBuyTaxRecipientUpdated(_sellAndBuyTaxRecipient);
}
```

❖ Low severity issues

No low-severity issues found

Owner privileges

❖ The owner can change max transactions amount

```solidity
function setMaxAmountPerTx(
    uint256 _maxAmountPerTx
) external onlyRole(ADMIN_ROLE) {
    require(
        _maxAmountPerTx > 0,
        "Max amount per tx must be greater than 0"
    );
    maxAmountPerTx = _maxAmountPerTx;
    emit MaxAmountPerTxUpdated(_maxAmountPerTx);
}
```

❖ The owner can change buy and sell fees

```solidity
/* ------ CONFIG FUNCTIONS ------ */
function setSellAndBuyTaxRate(
    uint256 _sellAndBuyTaxRate
) external onlyRole(ADMIN_ROLE) {
    require(
        _sellAndBuyTaxRate <= ONE_HUNDRED_PERCENT,
        "Sell and buy tax rate must be less than 100%"
    );
    sellAndBuyTaxRate = _sellAndBuyTaxRate;
    emit SellAndBuyTaxRateUpdated(_sellAndBuyTaxRate);
}
```

❖ The owner can enable/disable anti-whale (max transaction limit will apply when this enable)

```solidity
function antiWhaleSwitch(
    bool _isAntiWhaleEnabled
) external onlyRole(ADMIN_ROLE) {
    isAntiWhaleEnabled = _isAntiWhaleEnabled;
    emit AntiWhaleSwitched(_isAntiWhaleEnabled);
}
```

❖ The owner can change buy and sell tax receivers

```solidity
function setSellAndBuyTaxRecipient(
    address _sellAndBuyTaxRecipient
) external onlyRole(ADMIN_ROLE) {
    require(
        _sellAndBuyTaxRecipient != address(0),
        "Sell and buy tax recipient cannot be zero address"
    );
    sellAndBuyTaxRecipient = _sellAndBuyTaxRecipient;
    emit SellAndBuyTaxRecipientUpdated(_sellAndBuyTaxRecipient);
}
```

❖ The owner can change the V2 and V3 router address

```solidity
function setSwapRouter(
    address _swapRouter,
    SwapRouterVersion _version
) external onlyRole(ADMIN_ROLE) {
    require(
        _swapRouter != address(0),
        "Swap router cannot be zero address"
    );
    if (_version == SwapRouterVersion.V3) {
        swapRouterV3 = ISwapRouter(_swapRouter);
    } else {
        swapRouterV2 = IUniswapV2Router02(_swapRouter);
    }
    emit SwapRouterUpdated(_swapRouter, _version);
}
```

❖ The owner can add/remove LP pairs

```solidity
function addTokenPair(
    address _tokenPair,
    SwapRouterVersion _version
) external onlyRole(ADMIN_ROLE) {
    require(_tokenPair != address(0), "Token pair cannot be zero address");
    if (_version == SwapRouterVersion.V3) {
        isTokenPairV3[_tokenPair] = true;
    } else {
        isTokenPairV2[_tokenPair] = true;
    }
    emit AddTokenPair(_tokenPair, _version);
}

function removeTokenPair(
    address _tokenPair,
    SwapRouterVersion _version
) external onlyRole(ADMIN_ROLE) {
    require(_tokenPair != address(0), "Token pair cannot be zero address");
    if (_version == SwapRouterVersion.V3) {
        isTokenPairV3[_tokenPair] = false;
    } else {
        isTokenPairV2[_tokenPair] = false;
    }
    emit RemoveTokenPair(_tokenPair, _version);
}
```

Audit conclusion

RugFreeCoins team has performed in-depth testing, line-by-line manual code review, and automated audit of the smart contract. The smart contract was analyzed mainly for common smart contract vulnerabilities, exploits, manipulations, and hacks. According to the smart contract audit.

Smart contract functional Status:	PASS ⌄
Smart contract security status:	HIGH ⌄
Number of risk issues:	4
Solidity code functional issue level:	PASS ⌄
Number of owner privileges:	6
Centralization risk correlated to the active owner:	HIGH ⌄
Smart contract active ownership:	ACTIVE ⌄