Cyberscope

Audit Report

CHIHUAHUA FAMILY

August 2022

Type	BEP20
Network	BSC
Address	0xb3ce9356a5e664cd1a8733d96769e59cc06488f0
Audited by	© cyberscope

Table of Contents

Contract Review

Contract Name	CHIHUAHUAFAMILY
Compiler Version	v0.8.15+commit.e14f2714
Optimization	200 runs
Licence	MIT
Explorer	https://bscscan.com/token/0xb3ce9356a5e664cd1a8733d96769e59cc06488f0
Symbol	CHF
Decimals	18
Total Supply	10,000,000
Domain	https://chihuahuafamily.com

Source Files

Filename	**SHA256**
contract.sol	4cf8b4586ce12d7686baff7a48e07cdabe6a50135cfd4fbc7dbe5de0ebd07cfd

Audit Updates

Initial Audit	22nd August 2022
Corrected	

Contract Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OCTD	Transfers Contract's Tokens	Unresolved
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	ULTW	Transfers Liquidity to Team Wallet	Unresolved
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Unresolved

ELFM - Exceeds Fees Limit

Criticality	medium
Location	contract.sol#L724
Status	Unresolved

Description

The contract owner has the authority to increase over the allowed limit of 25%. The owner may take advantage of it by not setting an address to the antiSnipe variable. As a result, the fees will be 45%.

```
if (address(antiSnipe) == address(this)
    && (block.chainid == 1
    || block.chainid == 56)) { currentFee = 4500; }
```

Recommendation

The contract could embody a check for the maximum amount of funds that can be swapped. Since a huge amount may volatile the token's price.

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

BC - Blacklists Addresses

Criticality	medium
Location	contract.sol#L657
Status	Unresolved

Description

The contract owner has the authority to stop addresses from transactions. The owner may take advantage of it by calling the `setLaunch` function.

```
try antiSnipe.setLaunch(lpPair, uint32(block.number), uint64(block.timestamp), _decimals) {} catch {}
```

Recommendation

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

Contract Diagnostics

Critical Medium Minor / Informative

Severity	Code	Description	Status
●	US	Untrusted Source	Unresolved
●	STC	Succeeded Transfer Check	Unresolved
●	CO	Code Optimization	Unresolved
●	L01	Public Function could be Declared External	Unresolved
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L07	Missing Events Arithmetic	Unresolved
●	L09	Dead Code Elimination	Unresolved
●	L12	Using Variables before Declaration	Unresolved
●	L13	Divide before Multiply Operation	Unresolved
●	L14	Uninitialized Variables in Local Scope	Unresolved

US - Untrusted Source

Criticality	critical
Location	contract.sol#L204
Status	Unresolved

Description

The contract uses an external contract in order to determine the transaction's flow. The external contract is untrusted. As a result it may produce security issues and harm the transactions.

```
AntiSnipe antiSnipe;
```

Recommendation

The contract should use a trusted external source. A trusted source could be either a commonly recognized or an audited contract. The pointing addresses should not be able to change after the initialization.

STC - Succeeded Transfer Check

Criticality	minor / informative
Location	contract.sol#L603
Status	Unresolved

Description

According to the ERC20 specification, the transfer methods should be checked if the result is successful. Otherwise, the contract may wrongly assume that the transfer has been established.

```
if (ratios.marketing > 0){
            (success,) = _taxWallets.marketing.call{value: marketingBalance, gas: 35000}("");
}
```

Recommendation

The contract should check if the result of the transfer methods is successful.

CO - Code Optimization

Criticality	minor / informative
Location	contract.sol#L182
Status	Unresolved

Description

There are code segments that could be optimized. A segment may be optimized so that it becomes a smaller size, consumes less memory, executes more rapidly, or performs fewer operations.

The variable TaxWallets is redundant. There is no need to reserve memory for a structure.

```
struct TaxWallets {
        address payable marketing;
    }
```

Recommendation

Rewrite some code segments so the runtime will be more performant.

L01 - Public Function could be Declared External

Criticality	minor / informative
Location	contract.sol#L423,647,333,350
Status	Unresolved

Description

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

```
isBlacklisted
enableTrading
approveContractContingency
setNewRouter
```

Recommendation

Use the external attribute for functions never called from the contract.

L04 - Conformance to Solidity Naming Conventions

Criticality	minor / informative
Location	contract.sol#L136,487,135,33,123,182,199,436,167,120,134,133,138,159,169,153,170,168,166
Status	Unresolved

Description

Solidity defines a naming convention that should be followed. Rule exceptions:

- Allow constant variable name/symbol/decimals to be lowercase.
- Allow _ at the beginning of the mixed_case match for private variables and unused parameters.

```
_decimals
_minPeriod
_symbol
WETH
_allowances
_taxWallets
_hasLiqBeenAdded
_antiSnipe
maxSellTaxes
...
```

Recommendation

Follow the Solidity naming convention.
https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions.

L07 - Missing Events Arithmetic

Criticality	minor / informative
Location	contract.sol#L475,468,492
Status	Unresolved

Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes.

```
piSwapPercent = priceImpactSwapPercent
swapThreshold = (_tTotal * thresholdPercent) / thresholdDivisor
reflectorGas = gas
```

Recommendation

Emit an event for critical parameter changes.

L09 - Dead Code Elimination

Criticality	minor / informative
Location	contract.sol#L529
Status	Unresolved

Description

Functions that are not used in the contract, and make the code's size bigger.

```
_basicTransfer
```

Recommendation

Remove unused functions.

L12 - Using Variables before Declaration

Criticality	minor / informative
Location	contract.sol#L671
Status	Unresolved

Description

The contract is using a variable before the declaration. This is usually happening either if it has not been declared yet or the variable has been declared in a different scope.

```
check
```

Recommendation

The variables should be declared before any usage of them.

L13 - Divide before Multiply Operation

Criticality	minor / informative
Location	contract.sol#L575
Status	Unresolved

Description

Performing divisions before multiplications may cause lose of prediction.

```
toLiquify = ((contractTokenBalance * ratios.liquidity) / (ratios.total)) / 2
```

Recommendation

The multiplications should be prior to the divisions.

L14 - Uninitialized Variables in Local Scope

Criticality	minor / informative
Location	contract.sol#L671,670
Status	Unresolved

Description

The are variables that are defined in the local scope and are not initialized.

```
check
checked
```

Recommendation

All the local scoped variables should be initialized.

Contract Functions

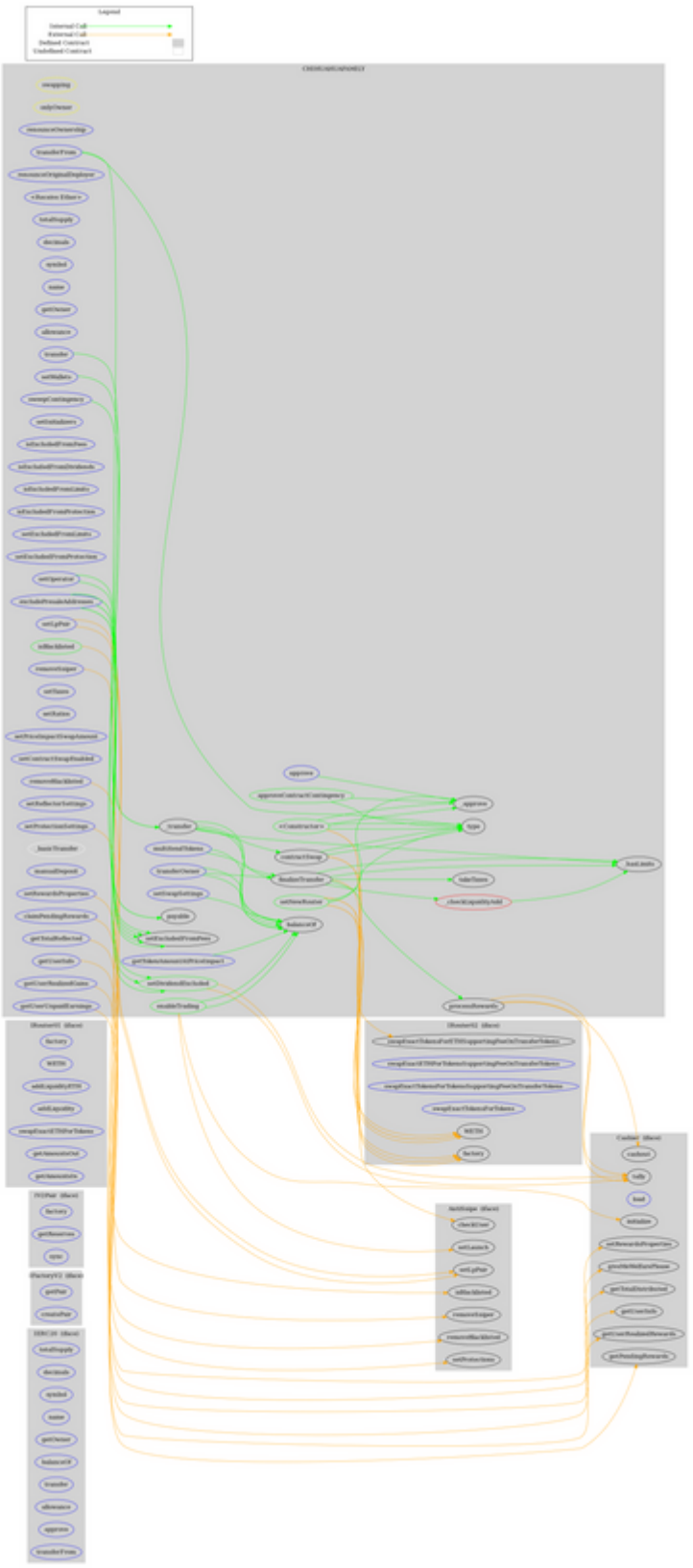
Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
IERC20	Interface			
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	getOwner	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
IFactoryV2	Interface			
	getPair	External		-
	createPair	External	✓	-
IV2Pair	Interface			
	factory	External		-
	getReserves	External		-
	sync	External	✓	-
IRouter01	Interface			
	factory	External		-
	WETH	External		-
	addLiquidityETH	External	Payable	-
	addLiquidity	External	✓	-
	swapExactETHForTokens	External	Payable	-
	getAmountsOut	External		-

	getAmountsIn	External		-
IRouter02	Interface	IRouter01		
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokens	External	✓	-
AntiSnipe	Interface			
	checkUser	External	✓	-
	setLaunch	External	✓	-
	setLpPair	External	✓	-
	setProtections	External	✓	-
	removeSniper	External	✓	-
	removeBlacklisted	External	✓	-
	isBlacklisted	External		-
Cashier	Interface			
	setRewardsProperties	External	✓	-
	tally	External	✓	-
	load	External	Payable	-
	cashout	External	✓	-
	giveMeWelfarePlease	External	✓	-
	getTotalDistributed	External		-
	getUserInfo	External		-
	getUserRealizedRewards	External		-
	getPendingRewards	External		-
	initialize	External	✓	-
CHIHUAHUAFAMILY	Implementation	IERC20		
	<Constructor>	Public	Payable	-
	transferOwner	External	✓	onlyOwner

	renounceOwnership	External	✓	onlyOwner
	setOperator	External	✓	-
	renounceOriginalDeployer	External	✓	-
	<Receive Ether>	External	Payable	-
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	getOwner	External		-
	balanceOf	Public		-
	allowance	External		-
	approve	External	✓	-
	_approve	Internal	✓	
	approveContractContingency	Public	✓	onlyOwner
	transfer	External	✓	-
	transferFrom	External	✓	-
	setNewRouter	Public	✓	onlyOwner
	setLpPair	External	✓	onlyOwner
	setInitializers	External	✓	onlyOwner
	isExcludedFromFees	External		-
	isExcludedFromDividends	External		-
	isExcludedFromLimits	External		-
	isExcludedFromProtection	External		-
	setExcludedFromLimits	External	✓	onlyOwner
	setDividendExcluded	Public	✓	onlyOwner
	setExcludedFromFees	Public	✓	onlyOwner
	setExcludedFromProtection	External	✓	onlyOwner
	isBlacklisted	Public		-
	removeSniper	External	✓	onlyOwner
	removeBlacklisted	External	✓	onlyOwner
	setProtectionSettings	External	✓	onlyOwner
	setWallets	External	✓	onlyOwner
	setTaxes	External	✓	onlyOwner
	setRatios	External	✓	onlyOwner

	getTokenAmountAtPriceImpact	External		-
	setSwapSettings	External	✓	onlyOwner
	setPriceImpactSwapAmount	External	✓	onlyOwner
	setContractSwapEnabled	External	✓	onlyOwner
	setRewardsProperties	External	✓	onlyOwner
	setReflectorSettings	External	✓	onlyOwner
	excludePresaleAddresses	External	✓	onlyOwner
	_hasLimits	Internal		
	_basicTransfer	Internal	✓	
	_transfer	Internal	✓	
	contractSwap	Internal	✓	swapping
	_checkLiquidityAdd	Private	✓	
	enableTrading	Public	✓	onlyOwner
	finalizeTransfer	Internal	✓	
	processRewards	Internal	✓	
	takeTaxes	Internal	✓	
	multiSendTokens	External	✓	onlyOwner
	manualDeposit	External	✓	onlyOwner
	sweepContingency	External	✓	onlyOwner
	claimPendingRewards	External	✓	-
	getTotalReflected	External		-
	getUserInfo	External		-
	getUserRealizedGains	External		-
	getUserUnpaidEarnings	External		-

Contract Flow



Domain Info

Domain Name	chihuahuafamily.com
Registry Domain ID	2719005137_DOMAIN_COM-VRSN
Creation Date	2022-08-18T17:26:00.00Z
Updated Date	0001-01-01T00:00:00.00Z
Registry Expiry Date	2023-08-18T17:26:00.00Z
Registrar WHOIS Server	whois.namecheap.com
Registrar URL	http://www.namecheap.com
Registrar	NAMECHEAP INC
Registrar IANA ID	1068

The domain was created 4 days before the creation of the audit. It will expire in 12 months.

There is no public billing information, the creator is protected by the privacy settings.

Summary

There are some functions that can be abused by the owner like manipulating fees and massively blacklisting addresses.

The contract can apply extra fees on chain id 1 and 56. The extra fees are 45% of the current transaction amount.

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Coinscope audit and K.Y.C. service has been rebranded to Cyberscope.

Coinscope is the leading early coin listing, voting and auditing authority firm. The audit process is analyzing and monitoring many aspects of the project. That way, it gives the community a good sense of security using an informative report and a generic score.

Cyberscope and Coinscope are aiming to make crypto discoverable and efficient globally. They provide all the essential tools to assist users draw their own conclusions.

The Cyberscope team

https://www.cyberscope.io