



TechRate
AUDIT COMPANY

Smart Contract Security Audit

Audit Details



Audited project

xHunter



Deployer address

0x30cd32373eefdc65bd99618151b8a8851aeaff29



Client contacts:

xHunter team



Blockchain

Binance Smart Chain



Project website:

<https://www.thexhunter.com/>

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 below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

Background

TechRate was commissioned by xHunter to perform an audit of smart contracts:

<https://bscscan.com/address/0x487e464ed2f07306d5d0add219c7e13d3be9d867#code>

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

Contracts Details

Token contract details for 06.10.2021

Contract name	xHunter
Contract address	0x487E464ED2F07306D5D0ADd219c7e13d3be9D867
Total supply	1,000,000,000,000,000
Token ticker	XHT
Decimals	9
Token holders	10,650
Transactions count	58,893
Top 100 holders dominance	85.19%
Liquidity/Buyback/Dev/ Marketing fee/gameDev fee	3/3/2/1/1
Launched at	1631556024
Total Tax	10
Uniswap V2 pair	0x5c42d7059010367a8bc9ae527eb0935e145d7500
Contract deployer address	0x30cd32373eefdc65bd99618151b8a8851aeaff29
Contract's current owner address	0x30cd32373eefdc65bd99618151b8a8851aeaff29

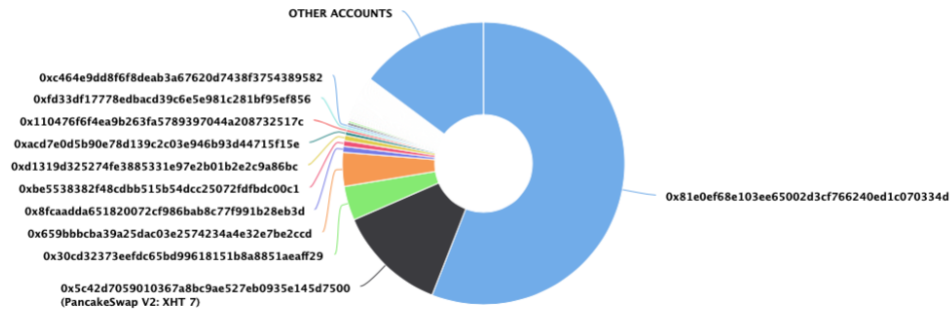
xHunter Token Distribution

The top 100 holders collectively own 85.19% (851,885,851,075,312.00 Tokens) of xHunter

Token Total Supply: 1,000,000,000,000.00 Token | Total Token Holders: 10,650

xHunter Top 100 Token Holders

Source: BscScan.com



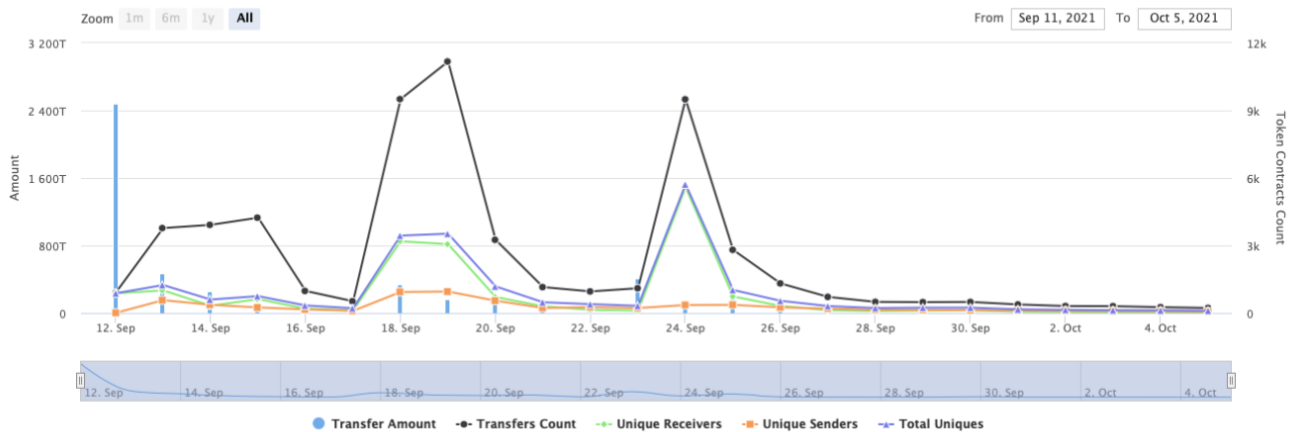
(A total of 851,885,851,075,312.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000.00 token)

xHunter Contract Interaction Details



Time Series: Token Contract Overview

Sun 12, Sept 2021 - Tue 5, Oct 2021

Token Contract 0x487e464ed2f07306d5d0add219c7e13d3be9d867 (xHunter)
Source: BscScan.com



xHunter Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	 0x81e0ef68e103ee65002d3cf766240ed1c070334d	559,400,000,000,000	55.9400%
2	 PancakeSwap V2: XHT 7	125,371,011,291,703.233506709	12.5371%
3	0x30cd32373eefdc65bd99618151b8a8851aeaff29	39,150,719,760,054	3.9151%
4	0x659bbbcba39a25dac03e2574234a4e32e7be2ccd	38,755,216,793,304.163402	3.8755%
5	0x8fcaadda651820072cf986bab8c77f991b28eb3d	6,841,259,996,787.870915271	0.6841%
6	0xbe5538382f48cdbb515b54dcc25072fd9bdc00c1	6,491,373,036,545.297369533	0.6491%
7	0xd1319d325274fe3885331e97e2b01b2e2c9a86bc	6,176,607,678,660.341384189	0.6177%
8	0xacd7e0d5b90e78d139c2c03e946b93d44715f15e	4,044,397,937,523.709158098	0.4044%
9	0x110476f6f4ea9b263fa5789397044a208732517c	2,802,888,618,579.478458514	0.2803%
10	0xfd33df17778edbacd39c6e5e981c281bf95ef856	2,715,609,913,484.014729169	0.2716%



Contract functions details

+ Context

- [Int] _msgSender
- [Int] _msgData

+ [Int] IERC20

- [Ext] totalSupply
- [Ext] balanceOf
- [Ext] transfer #
- [Ext] allowance
- [Ext] approve #
- [Ext] transferFrom #

+ [Lib] SafeMath

- [Int] add
- [Int] sub
- [Int] sub
- [Int] mul
- [Int] div
- [Int] div
- [Int] mod
- [Int] mod

+ [Lib] Address

- [Int] isContract
- [Int] sendValue #
- [Int] functionCall #
- [Int] functionCall #
- [Int] functionCallWithValue #
- [Int] functionCallWithValue #
- [Prv] _functionCallWithValue #

+ Ownable (Context)

- [Pub] <Constructor> #
- [Pub] owner
- [Pub] renounceOwnership #
 - modifiers: onlyOwner
- [Pub] transferOwnership #
 - modifiers: onlyOwner
- [Pub] getUnlockTime
- [Pub] getTime
- [Pub] lock #
 - modifiers: onlyOwner
- [Pub] unlock #

+ [Int] IUniswapV2Factory

- [Ext] feeTo
- [Ext] feeToSetter
- [Ext] getPair
- [Ext] allPairs
- [Ext] allPairsLength
- [Ext] createPair #

- [Ext] setFeeTo #
- [Ext] setFeeToSetter #

+ [Int] IUniswapV2Pair

- [Ext] name
- [Ext] symbol
- [Ext] decimals
- [Ext] totalSupply
- [Ext] balanceOf
- [Ext] allowance
- [Ext] approve #
- [Ext] transfer #
- [Ext] transferFrom #
- [Ext] DOMAIN_SEPARATOR
- [Ext] PERMIT_TYPEHASH
- [Ext] nonces
- [Ext] permit #
- [Ext] MINIMUM_LIQUIDITY
- [Ext] factory
- [Ext] token0
- [Ext] token1
- [Ext] getReserves
- [Ext] price0CumulativeLast
- [Ext] price1CumulativeLast
- [Ext] kLast
- [Ext] burn #
- [Ext] swap #
- [Ext] skim #
- [Ext] sync #
- [Ext] initialize #

+ [Int] IUniswapV2Router01

- [Ext] factory
- [Ext] WETH
- [Ext] addLiquidity #
- [Ext] addLiquidityETH (\$)
- [Ext] removeLiquidity #
- [Ext] removeLiquidityETH #
- [Ext] removeLiquidityWithPermit #
- [Ext] removeLiquidityETHWithPermit #
- [Ext] swapExactTokensForTokens #
- [Ext] swapTokensForExactTokens #
- [Ext] swapExactETHForTokens (\$)
- [Ext] swapTokensForExactETH #
- [Ext] swapExactTokensForETH #
- [Ext] swapETHForExactTokens (\$)
- [Ext] quote
- [Ext] getAmountOut
- [Ext] getAmountIn
- [Ext] getAmountsOut
- [Ext] getAmountsIn

+ [Int] IUniswapV2Router02 (IUniswapV2Router01)

- [Ext] removeLiquidityETHSupportingFeeOnTransferTokens #
- [Ext] removeLiquidityETHWithPermitSupportingFeeOnTransferTokens #

- [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
- [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens (\$)
- [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #

+ [Int] IPinkAntiBot

- [Ext] setTokenOwner #
- [Ext] onPreTransferCheck #

+ xHunter (Context, IERC20, Ownable)

- [Pub] <Constructor> #
- [Pub] name
- [Pub] symbol
- [Pub] decimals
- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] allowance
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Pub] minimumTokensBeforeSwapAmount
- [Pub] approve #
- [Prv] _approve #
- [Ext] changelsTxLimitExempt #
 - modifiers: onlyOwner
- [Ext] changelsAuthorized #
 - modifiers: onlyOwner
- [Pub] changelsExcludedFromFee #
 - modifiers: onlyOwner
- [Ext] changeWalletLimitExempt #
 - modifiers: onlyOwner
- [Ext] setEnableAntiBot #
 - modifiers: onlyOwner
- [Ext] setTaxes #
 - modifiers: onlyOwner
- [Ext] setMaxTxAmount #
 - modifiers: onlyOwner
- [Ext] enableDisableWalletLimit #
 - modifiers: onlyOwner
- [Ext] setWalletLimit #
 - modifiers: onlyOwner
- [Ext] changeOtherWallets #
 - modifiers: onlyOwner
- [Ext] changeDevWallets #
 - modifiers: onlyOwner
- [Pub] setHappyHourEnabled #
 - modifiers: onlyOwner
- [Pub] setSwapAndLiquifyEnabled #
 - modifiers: onlyOwner
- [Pub] setSwapAndLiquifyByLimitOnly #
 - modifiers: onlyOwner
- [Ext] setNumTokensBeforeSwap #
 - modifiers: onlyOwner
- [Pub] getCirculatingSupply
- [Prv] transferToAddressETH #
- [Pub] changeRouterVersion #
 - modifiers: onlyOwner

- [Ext] <Fallback> (\$)
- [Pub] transfer #
- [Pub] transferFrom #
- [Prv] _transfer #
- [Int] _basicTransfer #
- [Prv] swapAndLiquify #
 - modifiers: lockTheSwap
- [Prv] swapTokensForEth #
- [Prv] addLiquidity #
- [Int] takeFee #
- [Ext] prepareForPreSale #
 - modifiers: onlyOwner
- [Ext] prepareForLaunch #
 - modifiers: onlyOwner
- [Pub] openTrading #
 - modifiers: onlyOwner
- [Ext] changeTaxFreeBlocks #
 - modifiers: onlyOwner

(\$) = payable function

= non-constant function

Issues Checking Status

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	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 the exchange rate on the logic.	Passed
13. Private user 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. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

Security Issues

✓ High Severity Issues

No high severity issues found.

✓ Medium Severity Issues

No medium severity issues found.

✓ Low Severity Issues

No low severity issues found.

Notes:

- If `block.timestamp <= _botTaxWindowEnd` `finalTax` will equal `_happyHourSellTax`.

Owner privileges (In the period when the owner is not renounced)

- Owner can change fees.
- Owner can change the maximum transaction amount.
- Owner can exclude from the fee.
- Owner can fee wallets.
- Owner can enable antibot.
- Owner can change addresses authorized value.
- Owner can change minimum number of tokens before swap.
- Owner can enable/disable happy our.
- Owner can change Uniswap router address.
- Owner can change swap and liquify settings.
- Owner can run prepare for presale and launch presets.
- Owner can enable trading.
- Owner can change tax free blocks.
- Owner can change wallet limit and exclude from it.
- Owner can lock and unlock. By the way, using these functions the owner could retake privileges even after the ownership was renounced.

Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope.

Liquidity locking details provided by the team:

<https://bscscan.com/tx/0xd589feb8376be513ee6b6931808d179af07c3c193a4b0b20a4127e8025adec4b>

<https://bscscan.com/tx/0x8d35e2058baec2c0e882853f14e8c5c76dc0b42fa92fcd78b01a3da3c064a573>

<https://bscscan.com/tx/0xf48109ae5acaf274eb9959c3123651a6db0ff8e9ff89ffdd353d0cd89877f969>

TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.