



SAFETIN **AUDIT**

OCTAPLEX

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AUDIT SUMMARY

This report has been prepared for [Octaplex](#) to discover issues and vulnerabilities in the source code of the [Octaplex](#) project as well as any contract dependencies that were not part of an officially recognized library.

A comprehensive examination has been performed, utilizing Static Analysis, Manual Review, and [Testnet](#) Deployment techniques. The auditing process pays special attention to the following considerations:

- ❖ Testing the smart contracts against both common and uncommon attack vectors
- ❖ Assessing the codebase to ensure compliance with current best practices and industry standards
- ❖ Ensuring contract logic meets the specifications and intentions of the client
- ❖ Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders
- ❖ Through line-by-line manual review of the entire codebase by industry expert

AUDIT OVERVIEW

VULNERABILITY SUMMARY

The [Octaplex](#) Protocol is a decentralized finance ([DeFi](#)) token deployed on the Binance smart chain ([BSC](#)).

[Octaplex](#) mainly employs three features in its protocol : flexible reward for holders, auto buy-back and marketing - admins fee :

Each [Octaplex](#) transaction is taxed [10%](#) fees of the transaction amount. [4%](#) is sold to be redistributed as a reward to the holders in BNB, ETH, BUSD, MATIC, ADA, BTCB and/or PLX (each user can choose his rewards). [4%](#) is sold and accumulated internally until a sufficient amount of capital has been amassed to perform a [buy-back](#). When this number is reached, the total [BNBs](#) accumulated are used to buy [PLX](#). [1%](#) is sold and used for marketing, [0.6%](#) is sold and distributed to the admins, and [0.4%](#) is sold and distributed to the moderators.

PRIVILEGED FUNCTIONS

The contract contains the following privileged functions that are restricted by onlyAdmin or onlyMain modifiers. They are used to modify the contract configurations and address attributes. We grouped these functions below :

OWNERSHIP MANAGEMENT

- setMarketingOwnership
- setWorkHelper
- addtoAdminList
- setMainWallet

REWARDS MANAGEMENT

- AddTokentoPayoutList
- EditPayoutList
- StartRewardCalculation
- ExcludefromTax
- UndoExcludefromTax
- setAutoCalcRewards
- swapTaxTokenForBNB
- addBNBtoHolderPot
- setPromotedRewardTokenoftheWeek
- DistributeRewards

- sendAirdrop

LIQUIDITY MANAGEMENT

- addLiquidityFromContract

OTHERS

- setNperTransfer
- StartLaunch
- ToggleTransfers
- addBNBtoGasPot
- burnbeforeLaunch

AUDIT FINDINGS

1 | Risk to run out of gas in _PayTeam

Description

There is no limit to the number of admins in the AdminList which means that if a malicious administrator adds too many admins/mods to the AdminList/ModList, the for loop could ask too much computation and the _PayTeam function could run out of gas.

2 | Third-party dependencies

Description

The contract is serving as the underlying entity to interact with third party [PANCAKESWAP](#) protocols. The scope of the audit would treat those third party entities as black boxes and assume it's functional correctness. However in the real world, third parties may be compromised that led to assets lost or stolen.

We understand that the business logic of the [Octaplex Network](#) requires the interaction PancakeSwap protocol for adding liquidity to [PLX/BNB](#) pool and swap tokens.

Recommendation

We encourage the team to constantly monitor the statuses of those third parties to mitigate the side effects when unexpected activities are observed.

CONCLUSION

No major issue has been found in the [Octaplex Network](#) smart-contract. The two findings we reported are low severity issues, and are common to the majority of rewards smart-contracts.

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