



# SMART CONTRACT SECURITY AUDIT

BAT Protocol

October, 2021

Website: [soken.io](https://soken.io)

# Table of Contents

Table of Contents	2
Disclaimer	3
Procedure	4
Terminology	5
Limitations	5
Token Contract Details for 03.10.2021	6
Audit Details	6
Social Profiles	7
Token Contract Overview	7
BatPL Token Distribution	8
Vulnerabilities checking	9
Conclusion	10
Soken Contact Info	11

# Disclaimer

This is a comprehensive report based on our automated and manual examination of cybersecurity vulnerabilities and framework flaws. We took into consideration smart contract based algorithms, as well. Reading the full analysis report is essential to build your understanding of project's security level. It is crucial to take note, though we have done our best to perform this analysis and report, that you should not rely on the our research and cannot claim what it states or how we created it. Before making any judgments, you have to conduct your own independent research. We will discuss this in more depth in the following disclaimer - please read it fully.

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Security analysis is based only on the smart contracts. No applications or operations were reviewed for security. No product code has been reviewed.

# Procedure

## Our analysis contains following steps:

1. Project Analysis;
2. Manual analysis of smart contracts:
  - Deploying smart contracts on any of the network(Ropsten/Rinkeby) using Remix IDE
  - Hashes of all transaction will be recorded
  - Behaviour of functions and gas consumption is noted, as well.
3. Unit Testing:
  - Smart contract functions will be unit tested on multiple parameters and under multiple conditions to ensure that all paths of functions are functioning as intended.
  - In this phase intended behaviour of smart contract is verified.
  - In this phase, we would also ensure that smart contract functions are not consuming unnecessary gas.
  - Gas limits of functions will be verified in this stage.
4. Automated Testing:
  - Mythril
  - Oyente
  - Manticore
  - Solgraph

# Terminology

**We categorize the finding into 4 categories based on their vulnerability:**

- Low-severity issue — less important, must be analyzed
- Medium-severity issue — important, needs to be analyzed and fixed
- High-severity issue — important, might cause vulnerabilities, must be analyzed and fixed
- Critical-severity issue — serious bug causes, must be analyzed and fixed.

## Limitations

The security audit of Smart Contract cannot cover all vulnerabilities. Even if no vulnerabilities are detected in the audit, there is no guarantee that future smart contracts are safe. Smart contracts are in most cases safeguarded against specific sorts of attacks. In order to find as many flaws as possible, we carried out a comprehensive smart contract audit. Audit is a document that is not legally binding and guarantees nothing.

# Token Contract Details for 03.10.2021

Contract Name: **BatPL**

Deployed address: **0x64a38994a642BE549E721C41715D2DdBb83e2e8C**

Total Supply: **210,000,000**

Token Tracker: **BatPL**

Decimals: **18**

Token holders: **21**

Transactions count: **146**

Top 100 holders dominance: **100%**

## Audit Details



Project Name: **BAT Protocol**

Language: **Solidity**

Compiler version: **v.0.5.16**

Blockchain: **BSC**

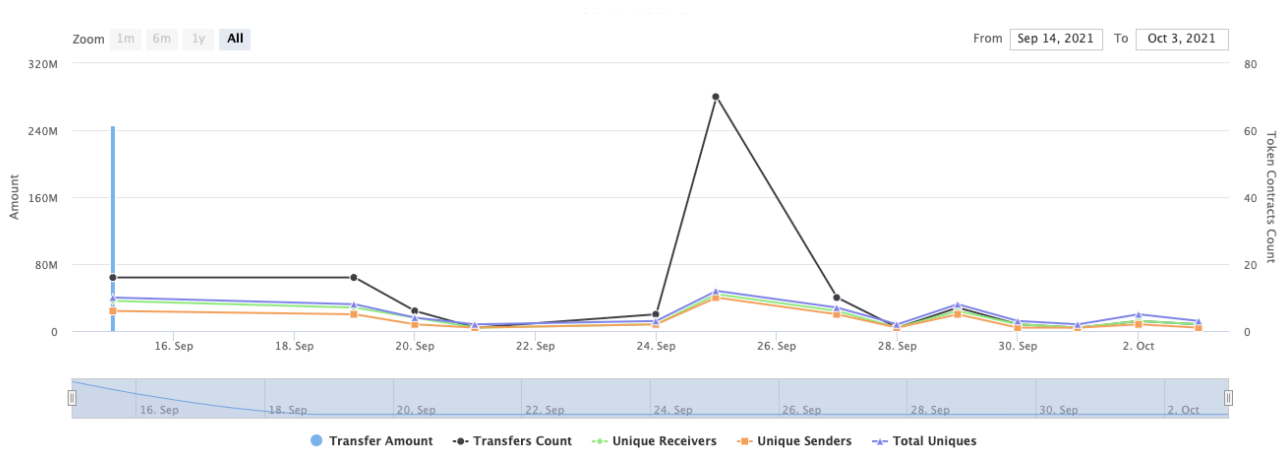
# Social Profiles

Project Website: **batprotocol.finance**

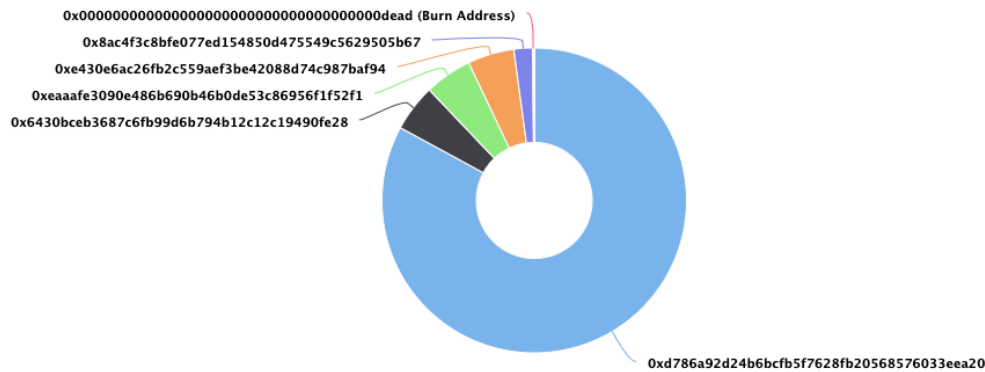
Project Twitter: **@BatProtocol**

Project Telegram: **BATProtocol**

## Token Contract Overview



# BatPL Token Distribution



## BatPL Top 10 Holders

Rank	Address	Quantity (Token)	Percentage
1	0xd786a92d24b6bcbf5f7628fb20568576033eea20	174,132,000	82.9200%
2	0x6430bceb3687c6fb99d6b794b12c12c19490fe28	10,500,000	5.0000%
3	0xeaaafe3090e486b690b46b0de53c86956f1f52f1	10,500,000	5.0000%
4	0xe430e6ac26fb2c559aef3be42088d74c987baf94	10,378,622.316041455892190157	4.9422%
5	0x8ac4f3c8bfe077ed154850d475549c5629505b67	4,100,000	1.9524%
6	Burn Address	292,735.311	0.1394%
7	0x636886da9ffe7a16a12ded94c17345b262ec1236	37,948	0.0181%
8	0xd95e68d83f6c98eb2183d272dd80a1fb287d1323	33,500	0.0160%
9	0x5db672637b1986cb699b1508dc37b2f8e8f3f03f	10,374.61	0.0049%
10	PancakeSwap V2: BSC-USD-BatPL	5,163.090759278803954817	0.0025%



# Vulnerabilities checking

Issue Description	Checking Status
Compiler Errors	Completed
Delays in Data Delivery	Completed
Re-entrancy	Completed
Transaction-Ordering Dependence	Completed
Timestamp Dependence	Completed
Shadowing State Variables	Completed
DoS with Failed Call	Completed
DoS with Block Gas Limit	Completed
Outdated Compiler Version	Completed
Assert Violation	Completed
Use of Deprecated Solidity Functions	Completed
Integer Overflow and Underflow	Completed
Function Default Visibility	Completed
Malicious Event Log	Completed
Math Accuracy	Completed
Design Logic	Completed
Fallback Function Security	Completed
Cross-function Race Conditions	Completed
Safe Zeppelin Module	Completed

# Conclusion

Smart contract is free from any critical or high-severity issues.

NOTE: Please check the disclaimer above and note, that audit makes no statements or warranties on business model, investment attractiveness or code sustainability.

## Soken Contact Info

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