

# Shiryo

Smart Contract Security Assessment
December 17, 2024

**VERACITY** 

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The audit report has made all reasonable attempts to provide clear and articulate recommendations to the Project team with respect to the rectification, amendment and/or revision of any highlighted issues, vulnerabilities or exploits within the contracts provided. It is the sole responsibility of the Project team to sufficiently test and perform checks, ensuring that the contracts are functioning as intended, specifically that the functions contained within said contracts have the desired intended effects, functionalities and outcomes of the Project team.

Disclaimer		
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### 1 Overview

This report has been prepared for **Shiryo project** Veracity provides an examination of the smart contracts to look for vulnerabilities, logic errors or other issues from both an internal and external perspective. The scope of this audit is the initial raise contract Deposit.sol, which includes industry standard libraries from OpenZepplin.

# 1.1 **Summary**

Name	Shiryo
URL	https://shiryo.com
Platform	Ethereum
Language	Solidity

Shiryo consists of 1 contract:

Shiryov2.sol	// Core contract for receiving investor deposits
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# 1.2 Testing

Following an initial pass on all contracts, we performed a series of tests. However it is not possible to catch all scenarios with these tests. Veracity has implemented a suite of audit tests that also exercise the primary functions of each contract to ensure that no transaction or fund locking occurs.

Tests have been implemented with the Foundry fuzz testing framework and some of the issues discovered are listed in the tables below. No further critical issues were discovered during this secondary process.

### 1.3 Final Contracts Assessed

Following deployment of the contracts assessed, Veracity compares the contracts that have been deployed, and wired with the contracts that have been audited to guarantee no tampering has been possible between audit report issue and project start.

This gives project owners and community members confidence that what has been deployed matches the findings and resolution status described in this document.

# https://github.com/krypt0ape/shiryo-contracts/blob/main/contracts/shiryov2.sol

Github hash: 3d03310

Deployment network: Ethereum

Project wallet address:

Links to verified contracts (1):

Name	Address	Network	Matched
Shiryov2.sol	ETH: https://etherscan.io/address/0x5bd03ed7d4cd9048 b95eceacb862becfdbd86ec2#code	Ethereum,	YES

There is 1 contract deployed.

# 1.4 Findings Summary

Individual issues found have been categorised based on criticality as high, medium, low or informational. The client is required to respond to each issue individually, although it may be by design and therefore simply acknowledged. Additional recommendations may apply to all contracts, but are replicated for each for resolution.

For example an issue relating to centralisation of financial risk may apply to all administration functions, but will be included only once per contract. The table below shows the collected number of issues found and the resolution statuses across all contracts in the project.

Severity	Found	Resolved	Partially Resolved	Acknowledged (no change)
• High	2	2	0	0
• Medium	1	1	0	0
• Low	1	1	0	0
<ul> <li>Informational</li> </ul>	0	0	0	0
Total	4	4	0	0

### 1.4.1 Status Classifications

Severity	Description
• High	Exploits, vulnerabilities or errors that will certainly or probabilistically lead towards loss of funds, control, or impairment of the contract and its functions. Issues under this classification are recommended to be fixed with utmost urgency.
• Medium	Bugs or issues with that may be subject to exploit, though their impact is somewhat limited. Issues under this classification are recommended to be fixed as soon as possible.
• Low	Effects are minimal in isolation and do not pose a significant danger to the project or its users. Issues under this classification are recommended to be fixed nonetheless.
<ul> <li>Informational</li> </ul>	Consistency, syntax or style best practices. Generally pose a negligible level of risk, if any.
Optimization	Suboptimal implementations that may result in additional gas consumption, unnecessary computation or avoidable inefficiencies.

### 1.4.2 Collected Issues and Statuses

ID	Contract	Severity	Summary	Status
01	Shiryov2.sol	MEDIUM	The code performs Ether transfers using .call but does not validate the success return value. Ignoring this can lead to silent failures if the transfer fails.	RESOLVED
02	Shiryov2.sol	LOW	The state variables router (Line 1136) and taxWallet (Line 1137) are not updated after deployment.  Declaring them as constant will save gas during contract execution.	RESOLVED
03	Shiryov2.sol	HIGH	swapBack() causes tokens to be locked in contract including ETH and token.	RESOLVED
04	Shiryov2.sol	HIGH	Absence of Minimum Return Amount in Token Swap	RESOLVED

# 2. Findings

The contract(s) assessed have been largely authored from scratch rather than using industry tested implementations for ERC20. Standard interfaces have been included inline which adds risk of errors, however code comparison shows no errors have been introduced during this process. This can result in the introduction of vulnerabilities or bugs that have not been seen or addressed in previous projects. However our team has made recommendations and several code sweeps to mitigate the effect of not using industry standard libraries. The following sections outline issues found with individual contracts.

# 2.1 Shiryo

This report has been prepared for the **Shiryo project**. Veracity provides an examination of the smart contracts to look for vulnerabilities, logic errors or other issues from both an internal and external perspective.

# 2.1.1 Privileged Roles

The following functions can be called by the admin or manager role of the Shiryo contract:

- renounceOwnership
- transferOwnership
- enableTrading
- removeLimits
- disableTransferDelay
- updateSwapTokensAtAmount
- updateMaxTxnAmount
- updateMaxWalletAmount
- excludeFromMaxTransaction
- updateSwapEnabled
- updateBuyFees
- updateSellFees
- excludeFromFees
- blacklistAccount
- setAutomatedMarketMakerPair
- updateFeeWallet
- setSlippage

### 2.1.2 Initial Token Allocation

No tokens are allocated on initialization..

# 2.1.3 Taxes, Rules, Initial Variables.

Name	Shiryo
Symbol	SHIRYO
Initial Supply	150 Million
Decimals	18
<b>Router</b> Uniswap V2: 0x7a250d5630B4cF539739dF2C5dAcb4c659F2488	

Reflection Fee	0
Liquidity Fee	0
Marketing Fee	0
Max Reflection Fee	
Max Buy Fee	40%
Max Sell Fee	40%

# 2.1.4 Shiryo Issues & Recommendation

# Issue Number: 1

Title: Missing success check after .call execution

Severity: Medium

Files: Shiryov2.sol

### Summary:

The code performs Ether transfers using .call but does not validate the success return value. Ignoring this can lead to silent failures if the transfer fails.

### **Proposed Fix:**

Add a require statement to check the success result and handle failures explicitly.

Update the Code as Follows:
 For devWallet transfer:

```
(bool success, ) = address(devWallet).call{value: ethForDev}("");
require(success, "Transfer to devWallet failed");
```

• For marketingWallet transfer:

```
(bool success, ) = address(marketingWallet).call{value:
  address(this).balance}("");
  require(success, "Transfer to marketingWallet failed");
```

# **Issue Number: 2**

Title: router and taxWallet should be declared constant

Severity: Low

File: Shiryov2.sol

# Summary:

The state variables router (Line 1136) and taxWallet (Line 1137) are not updated after deployment. Declaring them as constant will save gas during contract execution.

# **Proposed Fix:**

Update the variable declarations to include the constant keyword:

```
For router (L1136):
address public constant router = <address>;
For taxWallet (L1137):
address public constant taxWallet = <address>;
```

# **Issue Number:** 3

**Title:** swapBack() causes tokens to be locked in contract including ETH and token.

Severity: High

File: Shiryov2.sol L1518

# Summary:

The deployed token contract includes a mechanism to swap tokens for ETH when specific conditions are satisfied. However, with fees set to 0 and ownership renounced, the following condition in the swapBack() function blocks the swap operation:

if (contractBalance == 0 || totalTokensToSwap == 0) { return; }

# **Proposed Fix:**

Adjust the condition above in swapBack().

# **Issue Number: 4**

Title: Absence of Minimum Return Amount in Token Swap

Severity: High

File: shiryov2.sol

# Summary:

swapTokensForEth() at L1417 is invoked without setting amountOutMin, exposing the transaction to potential manipulation by bots through sandwich attacks.

# **Description:**

The function allows for token to ETH swaps with no lower limit on the ETH received (amountOutMin = 0). This causes unfavorable rates due to market manipulation such as front-running and sandwich attacks.

### Recommendation:

Implement slippage protection by setting an amountOutMin based on currentPrice as with getAmountsOut.