



SPYWOLF

Security Audit Report



Audit prepared for
ShadowLoan

Completed on
April 15, 2025

@SPYWOLFNETWORK



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SPYWOLF.CO





OVERVIEW

This goal of this report is to review the main aspects of the project to help investors make an informative decision during their research process.

You will find a a summarized review of the following key points:

- ✓ Contract's source code
- ✓ Owners' wallets
- ✓ Tokenomics
- ✓ Team transparency and goals
- ✓ Website's age, code, security and UX
- ✓ Whitepaper and roadmap
- ✓ Social media & online presence

“

The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal

- SPYWOLF Team -

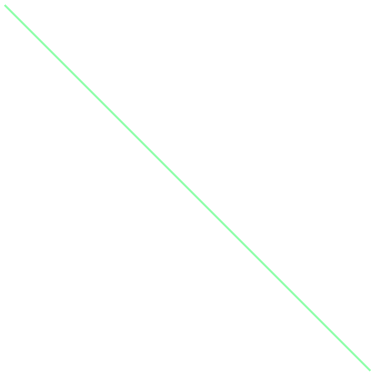
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ShadowLoan



PROJECT DESCRIPTION:

According to their website:

Introducing ShadowGold (SDG) on Polygon PoS – the world's first dual-liquidity token backed by 50% real gold (PAXG) and 50% Matic, with an external pool that invests in real-world equity to replenish the ecosystem. Holders passively receive real gold (as PAXG) just for holding. Easy. Revolutionary. Golden.

Release Date: TBD

Launchpad: Self Launch

Category: DeFi





KEY RESULTS

| | |
|--|--------|
| Cannot mint new tokens | * |
| Cannot pause trading (honeypot) | PASSED |
| Cannot blacklist an address | PASSED |
| Cannot raise taxes over 25%? | PASSED |
| No proxy contract detected | PASSED |
| Not required to enable trading | PASSED |
| No hidden ownership | PASSED |
| Cannot change the router | PASSED |
| No cooldown feature found | PASSED |
| Bot protection delay is lower than 5 blocks | PASSED |
| Cannot set max tx amount below 0.05% of total supply | PASSED |
| The contract cannot be self-destructed by owner | PASSED |

For a more detailed and thorough examination of the heightened risks, refer to the subsequent parts of the report.

N/A = Not applicable for this type of contract

*New tokens are minted on user deposits with the relevant value



CONTRACT INFO

Token Name
unavailable

Symbol
unavailable

Contract Address
unavailable

Network
unavailable

Language
Solidity

Deployment Date
unavailable

Contract Type
Pools and Borrowing

Total Supply
unavailable

Decimals
unavailable

TAXES

Buy Tax
0%

Sell Tax
0%

Our Contract Review Process

The contract review process pays special attention to the following:

- ✓ Testing the smart contracts against both common and uncommon vulnerabilities
- ✓ 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.
- ✓ Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- Solidity Compiler
- Hardhat



SMART CONTRACT STATS

| | |
|-----------------------|-------------|
| Calls Count | unavailable |
| External calls | unavailable |
| Internal calls | unavailable |
| Transactions count | unavailable |
| Last transaction time | unavailable |
| Deployment Date | unavailable |
| Create TX | unavailable |
| Owner | unavailable |
| Deployer | unavailable |

TOKEN TRANSFERS STATS

| | |
|-------------------------|-------------|
| Transfer Count | unavailable |
| Total Amount | unavailable |
| Median Transfer Amount | unavailable |
| Average Transfer Amount | unavailable |
| First transfer date | unavailable |
| Last transfer date | unavailable |
| Days token transferred | unavailable |



FEATURED WALLETS

| | |
|------------------------|-------------|
| Owner address | unavailable |
| Marketing fee receiver | unavailable |
| LP address | unavailable |

TOP 3 UNLOCKED WALLETS

| | |
|-------------|--|
| unavailable | |
| unavailable | |
| unavailable | |



VULNERABILITY ANALYSIS

| ID | Title | |
|---------|--------------------------------------|--------|
| SWC-100 | Function Default Visibility | Passed |
| SWC-101 | Integer Overflow and Underflow | Passed |
| SWC-102 | Outdated Compiler Version | Passed |
| SWC-103 | Floating Pragma | Passed |
| SWC-104 | Unchecked Call Return Value | Passed |
| SWC-105 | Unprotected Ether Withdrawal | Passed |
| SWC-106 | Unprotected SELFDESTRUCT Instruction | Passed |
| SWC-107 | Reentrancy | Passed |
| SWC-108 | State Variable Default Visibility | Passed |
| SWC-109 | Uninitialized Storage Pointer | Passed |
| SWC-110 | Assert Violation | Passed |
| SWC-111 | Use of Deprecated Solidity Functions | Passed |
| SWC-112 | Delegatecall to Untrusted Callee | Passed |
| SWC-113 | DoS with Failed Call | Passed |
| SWC-114 | Transaction Order Dependence | Passed |
| SWC-115 | Authorization through tx.origin | Passed |
| SWC-116 | Block values as a proxy for time | Passed |
| SWC-117 | Signature Malleability | Passed |
| SWC-118 | Incorrect Constructor Name | Passed |



VULNERABILITY ANALYSIS

| ID | Title | |
|---------|---|--------|
| SWC-119 | Shadowing State Variables | Passed |
| SWC-120 | Weak Sources of Randomness from Chain Attributes | Passed |
| SWC-121 | Missing Protection against Signature Replay Attacks | Passed |
| SWC-122 | Lack of Proper Signature Verification | Passed |
| SWC-123 | Requirement Violation | Passed |
| SWC-124 | Write to Arbitrary Storage Location | Passed |
| SWC-125 | Incorrect Inheritance Order | Passed |
| SWC-126 | Insufficient Gas Griefing | Passed |
| SWC-127 | Arbitrary Jump with Function Type Variable | Passed |
| SWC-128 | DoS With Block Gas Limit | Passed |
| SWC-129 | Typographical Error | Passed |
| SWC-130 | Right-To-Left-Override control character (U+202E) | Passed |
| SWC-131 | Presence of unused variables | Passed |
| SWC-132 | Unexpected Ether balance | Passed |
| SWC-133 | Hash Collisions With Multiple Variable Length Arguments | Passed |
| SWC-134 | Message call with hardcoded gas amount | Passed |
| SWC-135 | Code With No Effects | Passed |
| SWC-136 | Unencrypted Private Data On-Chain | Passed |



VULNERABILITY ANALYSIS

NO ERRORS FOUND



MANUAL CODE REVIEW

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time.

We categorize these vulnerabilities by 4 different threat levels.

THREAT LEVELS

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance, functionality and should be fixed before moving to a live environment.

Low Risk

Issues on this level are minor details and warning that can remain unfixed.

Informational

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.



FOUND THREATS

High Risk: 0

No high risk-level threats found in this contract.

Medium Risk: 0

No medium risk-level threats found in this contract.

Low Risk: 1

1 low risk-level threats found in this contract.



FOUND THREATS

⚠ Low Risk (Collsurpluspool):

`_checkOnGoldReceived()` will return false, causing transaction to revert if Borroweroperations contract does not have onGoldReceived function. Currently Borroweroperations contract does not have onGoldReceived function.

```
function claimColl(address _account) external override {
    _requireCallerIsBorrowerOperations();
    uint claimableColl = balances[_account];
    require(claimableColl > 0, "CollSurplusPool: No collateral available to claim");

    balances[_account] = 0;
    emit CollBalanceUpdated(_account, 0);

    ETH = ETH.sub(claimableColl);
    emit EtherSent(_account, claimableColl);

    IERC20(goldTokenAddress).safeTransfer(_account, claimableColl);
    require(_checkOnGoldReceived(address(this), _account, claimableColl), "CollSurplusPool: transfer to non GoldReceiver");
}

bytes4 private constant _GOLD_RECEIVED = bytes4(keccak256("onGoldReceived(address,address,uint256)"));

function _checkOnGoldReceived(address from, address to, uint amount)
    internal returns (bool)
{
    if (!to.isContract()) {
        return true;
    }
    bytes memory returndata = to.functionCall(abi.encodeWithSelector(
        IGoldReceiver(to).onGoldReceived.selector,
        from,
        to,
        amount
    ), "GoldSender: transfer to non GoldReceiver implementer");
    bytes4 retval = abi.decode(returndata, (bytes4));
    return (retval == _GOLD_RECEIVED);
}
```



FOUND THREATS

Informational (Borrower)

Gold token `_activePool` receiver should be either EOA or contract that have `onGoldReceived(address,address,uint256)` function.

```
function openTrove(uint _maxFeePercentage, uint _LUSDAmount, address _upperHint,
address _lowerHint, uint256 _amount) external override {
    .....
    goldToken.safeTransferFrom(msg.sender, address(this), _amount);
    _activePoolAddColl(contractsCache.activePool, _amount);
    .....
}

function _activePoolAddColl(IActivePool _activePool, uint _amount) internal {
    goldToken.safeTransfer(address(_activePool), _amount);
    require(_checkOnGoldReceived(address(this), address(_activePool), _amount),
    "BorrowerOperations: transfer to non GoldReceiver");
}

function _checkOnGoldReceived(address from, address to, uint amount)
    internal returns (bool)
{
    if (!to.isContract()) {
        return true;
    }
    bytes memory returndata = to.functionCall(abi.encodeWithSelector(
        IGoldReceiver(to).onGoldReceived.selector,
        from,
        to,
        amount
    ), "GoldSender: transfer to non GoldReceiver implementer");
    bytes4 retval = abi.decode(returndata, (bytes4));
    return (retval == _GOLD_RECEIVED);
}

function onGoldReceived(address _from, address _to, uint _amount) public override returns (bytes4){
    _requireCallerIsActivePool();

    uint balance = IERC20(goldTokenAddress).balanceOf(address(this));
    require(ETH.add(_amount) <= balance, "CollSurplusPool: not received collateral");
    ETH = ETH.add(_amount);

    return super.onGoldReceived(_from, _to, _amount);
}
```



FOUND THREATS

Informational

If the sum of current goldTokens balance + added goldTokens is higher than contract's current balance, transaction will revert. This is valid for all contracts that utilize the onGoldReceived() functionality (ActivePool, DefaultPool, StabilityPool, Collsurpluspool).

```
function onGoldReceived(address _from, address _to, uint _amount) public override returns (bytes4){
    _requireCallerIsActivePool();

    uint balance = IERC20(goldTokenAddress).balanceOf(address(this));
    require(ETH.add(_amount) <= balance, "CollSurplusPool: not received collateral");
    ETH = ETH.add(_amount);

    return super.onGoldReceived(_from, _to, _amount);
}
```




Website URL:
https://shadowfi.com/

Domain Registry
Private

Domain Expiration
Private

Technical SEO Test
Passed

Security Test
Passed. SSL certificate present

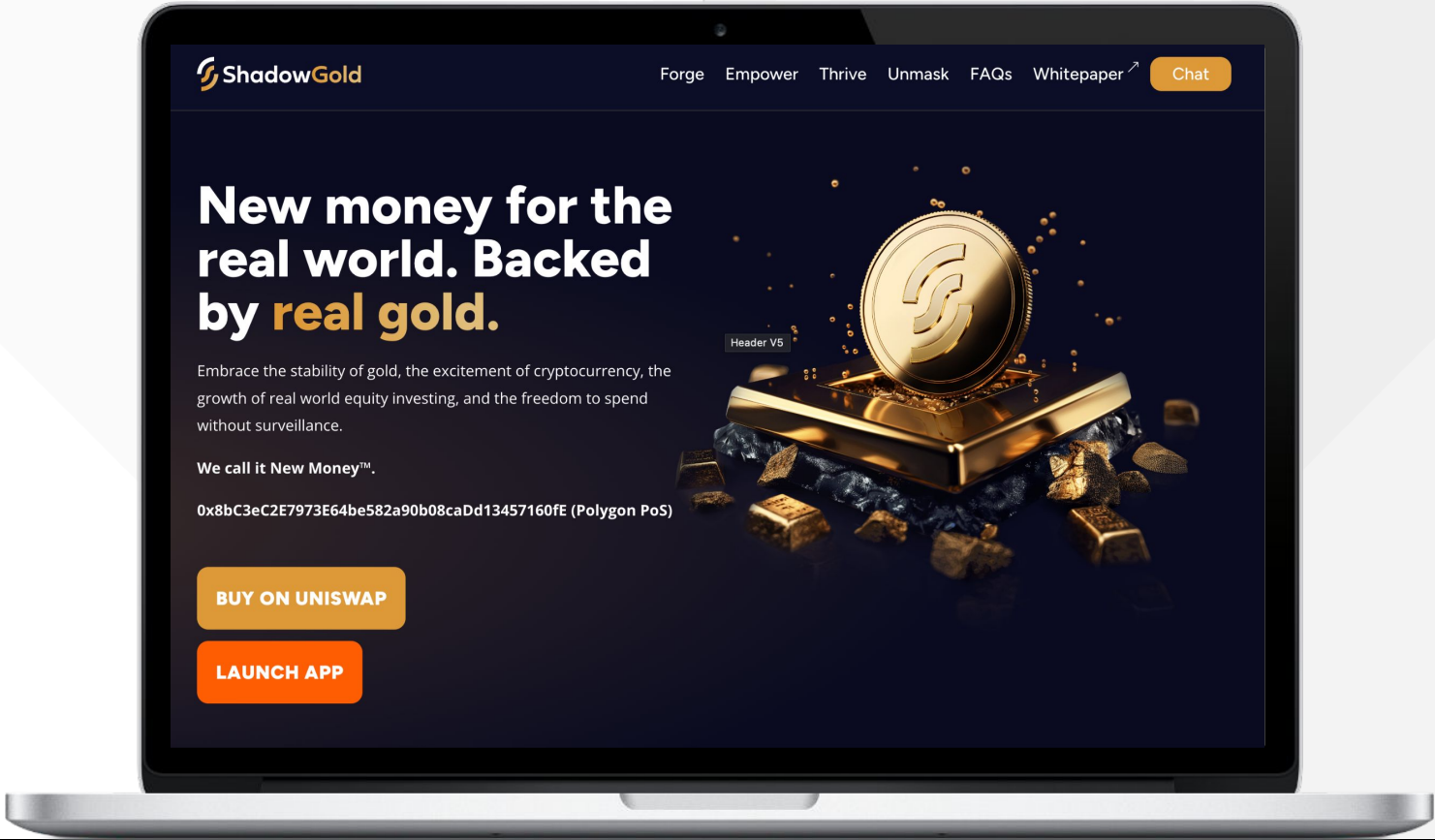
Design
Very nice design and use of elements. Easy to read.

Content
The information provides a clear idea of what the project is about and their goals.

Whitepaper
Yes

Roadmap
Yes

Mobile-friendly?
Yes

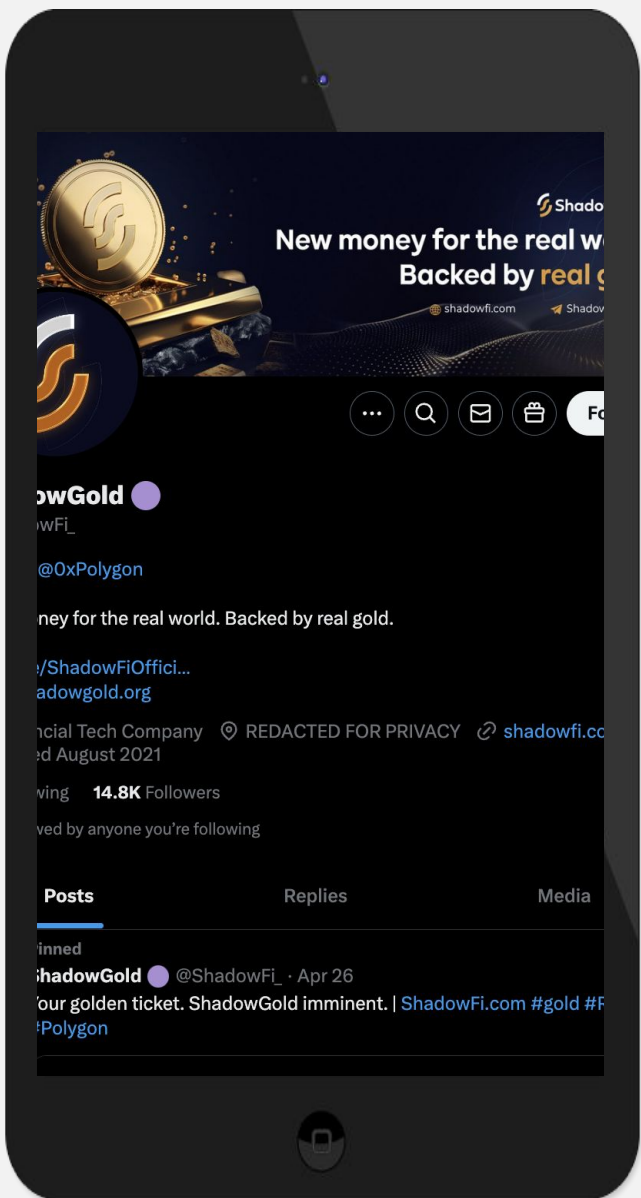
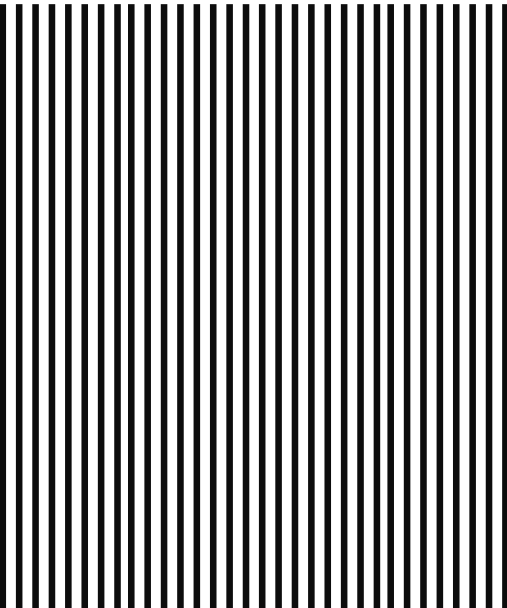




SOCIAL MEDIA



ANALYSIS
Social media pages
are very active.



Twitter:

@shadowfi_

- 14.8K Followers
- Daily posts



Discord

unavailable



Telegram:

@ShadowFiOfficial

- 4 552 members
- Active community and mods



Medium

@shadowfi

- 8 posts
- Informative



SPYWOLF

CRYPTO SECURITY

Audits | KYCs | dApps
Contract Development

ABOUT US

We are a growing crypto security agency offering audits, KYCs and consulting services for some of the top names in the crypto industry.

- ✓ OVER 700 SUCCESSFUL CLIENTS
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Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency 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 disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.

