SPYWOLF

Security Audit Report

Audit prepared for

Panda TapTap

Completed on

October 23, 2024

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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PandaTapTap

PROJECT DESCRIPTION:

According to their website:

Panda TapTap was born from the inspiration of combining entertainment and technology. The project is not only a fun meme coin but also aims to create a GameFi ecosystem where users can earn rewards by playing games and interacting with Panda characters.

With each “Tap”, players earn money and experience the development of DeFi through the innovative lens of Panda TapTap.

Release Date: October 22, 2024

Launchpad: Pinksale

Category: Meme token / GameFi

KEY RESULTS

Cannot mint new tokens	PASSED
Cannot pause trading (honeypot)	NOT 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

*Only new deposits/reinvestments can be paused

CONTRACT INFO

Token Name
PandaTapTap

Symbol
EarnTapTapPD

Contract Address
0x9Ec353152C2393F0b0d5A89Fe5a3DB0A3EA67580

Network
BSC

Language
Solidity

Deployment Date
Oct 14, 2024

Contract Type
Reflections token

Total Supply
1,000,000,000

Decimals
9

TAXES

Buy Tax
3%

Sell Tax
3%

*Taxes can be changed in future

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	27
External calls	5
Internal calls	22
Transactions count	12
Last transaction time	2024-10-16 10:04:42 UTC
Deployment Date	2024-10-16 07:24:42 UTC
Create TX	0x001a73edfc37a1b75e23ba929cc3c1287cf281ec5b72f914b00bf0b490e3d60b
Owner	0x2E4111eD8e26caB06545bfBB38F2e121d6D8B6C7
Deployer	0x2E4111eD8e26caB06545bfBB38F2e121d6D8B6C7

TOKEN TRANSFERS STATS

Transfer Count	11
Total Amount	3000000000 EarnTaptapPD
Median Transfer Amount	50000000 EarnTaptapPD
Average Transfer Amount	272727272.72727275 EarnTaptapPD
First transfer date	2024-10-14
Last transfer date	2024-10-16
Days token transferred	3 Days

FEATURED WALLETS

Owner address	0x2E4111eD8e26caB06545bfBB38F2e121d6D8B6C7
Marketing fee receiver	0x0C72DB68eeE956C1f3eD6166508e9854dA5dfD3D
LP address	**Pancakeswap:** 0x91B476A01a2BE58E594E1d3D3d11a7d0a828C351 Liquidity is not added yet

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.

Code Score: 70%

FOUND THREATS

⚠ High Risk: 0

No high risk-level threats found in this contract.

⚠ Medium Risk: 2

No medium risk-level threats found in this contract.

⚠ Low Risk: 0

No low risk-level threats found in this contract.

FOUND THREATS

⚠ Medium Risk

Owner can update marketing, dev and ops addresses.
If either of this addresses is set to contract that cannot receive BNB, contract will halt once trying to use the sendValue() function.

```
function updateMarketingWallet(address newWallet) external onlyOwner {
    require(newWallet != address(0),"Fee Address cannot be zero address");
    marketingWallet = newWallet;
}

function updateDevWallet(address newWallet) external onlyOwner {
    require(newWallet != address(0),"Fee Address cannot be zero address");
    devWallet = newWallet;
}

  function updateOpsWallet(address newWallet) external onlyOwner {
    require(newWallet != address(0),"Fee Address cannot be zero address");
    opsWallet = newWallet;
}

function swapAndLiquify(uint256 contractBalance, Taxes memory temp) private lockTheSwap {
.....................
    uint256 marketingAmt = unitBalance * 2 * temp.marketing;
    if (marketingAmt > 0) {
        payable(marketingWallet).sendValue(marketingAmt);
    }

    uint256 devAmt = unitBalance * 2 * temp.dev;
    if (devAmt > 0) {
        payable(devWallet).sendValue(devAmt);
    }

    uint256 opsAmt = unitBalance * 2 * temp.ops;
    if (opsAmt > 0) {
        payable(opsWallet).sendValue(opsAmt);
    }
.....................
}

function sendValue(address payable recipient, uint256 amount) internal {
    require(address(this).balance >= amount, "Address: insufficient balance");

    (bool success, ) = recipient.call{ value: amount }("");
    require(success, "Address: unable to send value, recipient may have reverted");
}
```

- Recommendation:
  - Remove both require() statements in sendValue() function.

FOUND THREATS

⚠ Medium Risk

Owner can change contract's auto swap settings.
When swapEnabled is true and swapTokensAtAmount is set to 0, contract will halt on sell.

```
function updateSwapTokensAtAmount(uint256 amount) external onlyOwner {
    require(amount <= 1e7, "Cannot set swap threshold amount higher than 1% of tokens");
    swapTokensAtAmount = amount * 10**_decimals;
}

function updateSwapEnabled(bool _enabled) external onlyOwner {
    swapEnabled = _enabled;
}

function _transfer(
    address from,
    address to,
    uint256 amount
) private {
.....................
bool canSwap = balanceOf(address(this)) >= swapTokensAtAmount;
if (
    !swapping &&
    swapEnabled &&
    canSwap &&
    from != pair &&
    !_isExcludedFromFee[from] &&
    !_isExcludedFromFee[to]
) {
    if (to == pair) swapAndLiquify(swapTokensAtAmount, sellTaxes);
    else swapAndLiquify(swapTokensAtAmount, taxes);
}
.....................
}
```

- Recommendation:
  - Ensure that swapTokensAtAmount state variable is always set above at least 1 token.

FOUND THREATS

Informational: 5

Transfer event on taxed transfers is emitted only if liquidity tax is higher than 0.
If other taxes are higher than 0 but the liquidity tax is 0, no fees transfer event is emitted and it won't be visible on blockchain explorers like BSCScan.

```
function _tokenTransfer(
    address sender,
    address recipient,
    uint256 tAmount,
    bool takeFee,
    bool isSell
) private {
.....................
if (s.rLiquidity > 0 || s.tLiquidity > 0) {
    _takeLiquidity(s.rLiquidity, s.tLiquidity);
    emit Transfer(
        sender,
        address(this),
        s.tLiquidity + s.tMarketing + s.tDev + s.tOps
    );
}
if (s.rMarketing > 0 || s.tMarketing > 0) _takeMarketing(s.rMarketing, s.tMarketing);
if (s.rDev > 0 || s.tDev > 0) _takeDev(s.rDev, s.tDev);
if (s.rOps > 0 || s.tOps > 0) _takeOps(s.rOps, s.tOps);
.....................
}
```

FOUND THREATS

Informational: 5

Owner can set buy/sell fees up to 10% each.
Combined buy+sell = 20%.
When fees are above 0, there will be certain amount of tokens that will be deducted from every transaction that users make.
Deducted amount will be as much as the fees % from total amount that user had bought, sold and/or transferred.

```
function setTaxes(
    uint256 _rfi,
    uint256 _marketing,
    uint256 _ops,
    uint256 _liquidity,
    uint256 _dev
) public onlyOwner {
    require((_rfi + _marketing + _ops +_liquidity + _dev ) <= 10,
    "Must keep fees at 10% or less");
    taxes = Taxes(_rfi, _marketing, _ops, _liquidity, _dev);
    emit FeesChanged();
}

function setSellTaxes(
    uint256 _rfi,
    uint256 _marketing,
    uint256 _ops,
    uint256 _liquidity,
    uint256 _dev
) public onlyOwner {
    require((_rfi + _marketing + _ops + _liquidity + _dev ) <= 10,
    "Must keep fees at 10% or less");
    sellTaxes = Taxes(_rfi, _marketing, _ops ,_liquidity, _dev);
    emit FeesChanged();
}
```

FOUND THREATS

Informational: 5

Owner can withdraw any tokens from the contract.
When this function is present, in cases tokens and/or BNB are sent into the contract by mistake or purposefully, contract's owner can retrieve them.

```
function rescueBNB(uint256 weiAmount) external onlyOwner {
    require(address(this).balance >= weiAmount, "insufficient BNB balance");
    payable(msg.sender).transfer(weiAmount);
}

//Use this in case BEP20 Tokens are sent to the contract by mistake
function rescueAnyBEP20Tokens(address _tokenAddr,address _to, uint256 _amount) public onlyOwner {
    require(_tokenAddr != address(this), "Owner can't claim contract's balance of its own tokens");
    IBEP20(_tokenAddr).transfer(_to, _amount);
}
```

Owner can exclude address from fees.
When address is excluded from fees, the user will receive the whole amount of the bought, sold and/or transferred to

```
function excludeFromFee(address account) public onlyOwner {
    _isExcludedFromFee[account] = true;
}

function bulkExcludeFee(address[] memory accounts, bool state) external onlyOwner {
    for (uint256 i = 0; i < accounts.length; i++) {
        _isExcludedFromFee[accounts[i]] = state;
    }
}
```

FOUND THREATS

Informational: 5

Owner can exclude address from reflections rewards.

```
function excludeFromReward(address account) public onlyOwner {
    require(!_isExcluded[account], "Account is already excluded");
    if (_rOwned[account] > 0) {
        _tOwned[account] = tokenFromReflection(_rOwned[account]);
    }
    _isExcluded[account] = true;
    _excluded.push(account);
}
```

The following tokenomics are based on Pinksale's presale page:

Tokenomics:

Burnt - 50%,

Presale - 18.85%,

Liquidity - 9.15%,

CEX - 5%,

Advertising & Growth - 5%,

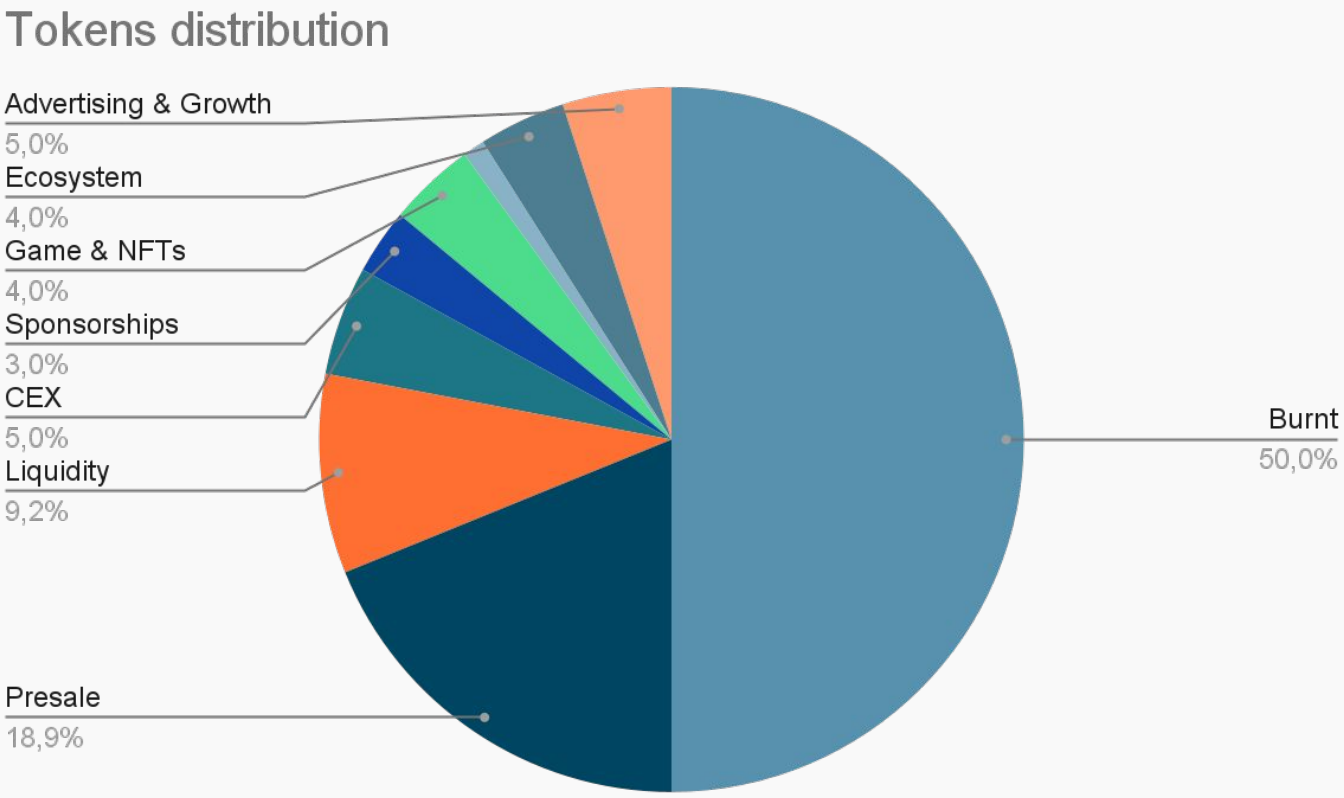
Ecosystem - 4%,

Game & NFTs - 4%,

Sponsorships - 3%,

Airdrop - 1%

Token Distribution



TOKENOMICS

WEBSITE

Website URL:
https://pandataptap.com/

Domain Registry
https://www.godaddy.com

Domain Expiration
2025-10-12

Technical SEO Test
Passed

Security Test
Passed. SSL certificate present

Design
Very nice color scheme and overall layout.

Content
The information helps new investors understand what the product does right away. No grammar mistakes found.

Whitepaper
No

Roadmap
Yes, goals set without time frames

Mobile-friendly?
Yes

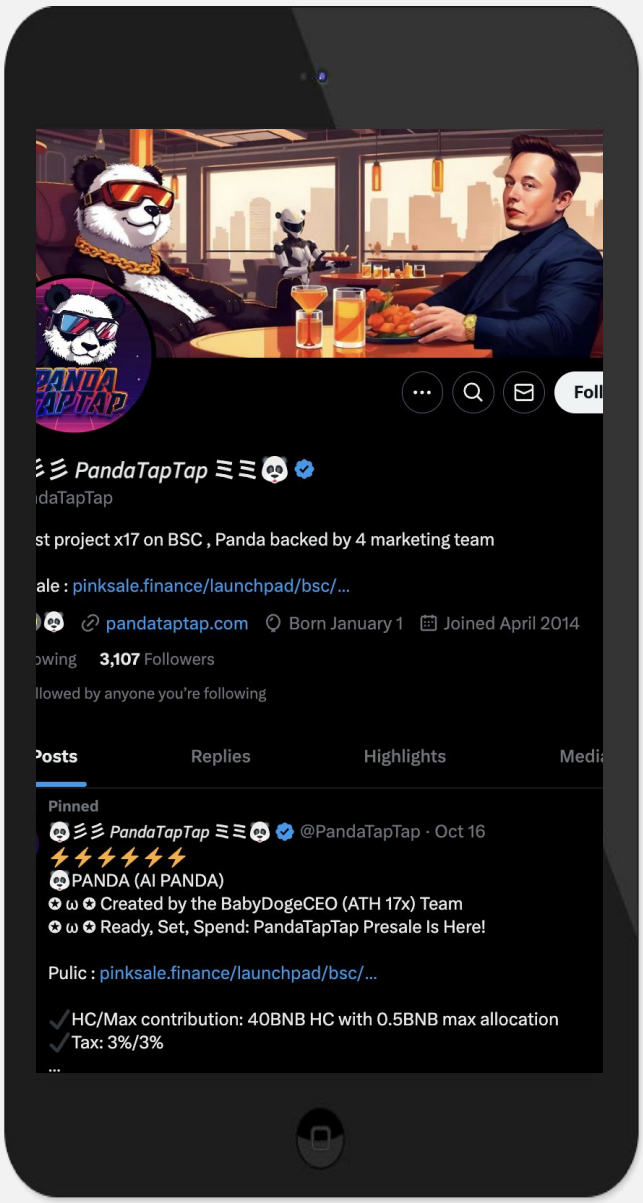
Website Score: 100%

SOCIAL MEDIA

Social Score: 100%

ANALYSIS

Project's social media pages are active



Twitter:

@PandaTapTap

- 2 973 followers
- Posts frequently
- Active

Discord

Unavailable

Telegram:

@PanDaTapTapBNB

- 2 367 members
- Active members
- Active mods

Medium

Unavailable

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

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