



Cyberscope

Audit Report

PawFury

November 2023

Network ETH

Address 0x27f465E99725071c671c346E08BD99eF93567b8C

Audited by © cyberscope

Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

Diagnostics

● Critical ● Medium ● Minor / Informative

Severity	Code	Description	Status
●	UPC	Unrestricted Pair Configuration	Unresolved
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L16	Validate Variable Setters	Unresolved

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Review

Contract Name	PawFuryToken
Compiler Version	v0.8.21+commit.d9974bed
Optimization	200 runs
Explorer	https://etherscan.io/address/0x27f465e99725071c671c346e08bd99ef93567b8c
Address	0x27f465e99725071c671c346e08bd99ef93567b8c
Network	ETH
Symbol	PAW
Decimals	18
Total Supply	2,000,000,000

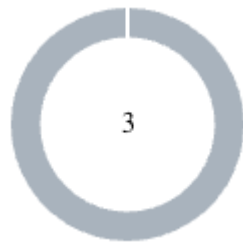
Audit Updates

Initial Audit	02 Nov 2023
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Source Files

Filename	SHA256
contracts/PawfuryToken.sol	f67f6298def83346756d85fbefd17f57aebc db0c7800a224546ca2ceecc77bd1
@openzeppelin/contracts/utils/Context.sol	1458c260d010a08e4c20a4a517882259a2 3a4baa0b5bd9add9fb6d6a1549814a
@openzeppelin/contracts/token/ERC20/IERC20.sol	94f23e4af51a18c2269b355b8c7cf4db800 3d075c9c541019eb8dcf4122864d5
@openzeppelin/contracts/token/ERC20/ERC20.sol	bce14c3fd3b1a668529e375f6b70ffdf9cef 8c4e410ae99608be5964d98fa701
@openzeppelin/contracts/token/ERC20/extensions /IERC20Metadata.sol	af5c8a77965cc82c33b7ff844deb9826166 689e55dc037a7f2f790d057811990
@openzeppelin/contracts/token/ERC20/extensions /ERC20Burnable.sol	0344809a1044e11ece2401b4f7288f414ea 41fa9d1dad24143c84b737c9fc02e
@openzeppelin/contracts/access/Ownable.sol	9353af89436556f7ba8abb3f37a6677249a a4df6024fbfaa94f79ab2f44f3231

Findings Breakdown



● Critical	0
● Medium	0
● Minor / Informative	3

Severity	Unresolved	Acknowledged	Resolved	Other
● Critical	0	0	0	0
● Medium	0	0	0	0
● Minor / Informative	3	0	0	0

UPC - Unrestricted Pair Configuration

Criticality	Minor / Informative
Location	contracts/PawfuryToken.sol#L39
Status	Unresolved

Description

The `setPairs` function allows the contract owner to set multiple pair addresses to any arbitrary value without validation. This lack of validation can lead to unintended behavior, including the potential disruption of the contract's transfer flow as long as the transactions are disabled.

```
function setPairs(  
    address[] calldata pairs,  
    bool[] calldata status  
) external onlyOwner {  
    require(!tradingEnabled, "MK: trading already enabled");  
    require(pairs.length == status.length, "MK: invalid parameters");  
    for (uint256 i = 0; i < pairs.length; i++) {  
        _pairs[pairs[i]] = status[i];  
    }  
    emit PairsUpdated();  
}
```

Recommendation

To enhance security and prevent the contract owner from setting arbitrary values as pair addresses, the team is advised to implement proper validation checks in the `setPairs` function. These checks should include verifying that the provided addresses are valid before allowing it to be set. This will help ensure the integrity of the contract's operation.

L04 - Conformance to Solidity Naming Conventions

Criticality	Minor / Informative
Location	contracts/PawfuryToken.sol#L9
Status	Unresolved

Description

The Solidity style guide is a set of guidelines for writing clean and consistent Solidity code. Adhering to a style guide can help improve the readability and maintainability of the Solidity code, making it easier for others to understand and work with.

The followings are a few key points from the Solidity style guide:

1. Use camelCase for function and variable names, with the first letter in lowercase (e.g., myVariable, updateCounter).
2. Use PascalCase for contract, struct, and enum names, with the first letter in uppercase (e.g., MyContract, UserStruct, ErrorEnum).
3. Use uppercase for constant variables and enums (e.g., MAX_VALUE, ERROR_CODE).
4. Use indentation to improve readability and structure.
5. Use spaces between operators and after commas.
6. Use comments to explain the purpose and behavior of the code.
7. Keep lines short (around 120 characters) to improve readability.

```
address private constant _router =  
    0x7a250d5630B4cF539739dF2C5dAcb4c659F2488D
```

Recommendation

By following the Solidity naming convention guidelines, the codebase increased the readability, maintainability, and makes it easier to work with.

Find more information on the Solidity documentation

<https://docs.soliditylang.org/en/v0.8.17/style-guide.html#naming-convention>.

L16 - Validate Variable Setters

Criticality	Minor / Informative
Location	contracts/PawfuryToken.sol#L35
Status	Unresolved

Description

The contract performs operations on variables that have been configured on user-supplied input. These variables are missing of proper check for the case where a value is zero. This can lead to problems when the contract is executed, as certain actions may not be properly handled when the value is zero.

```
_launcher = launcher
```

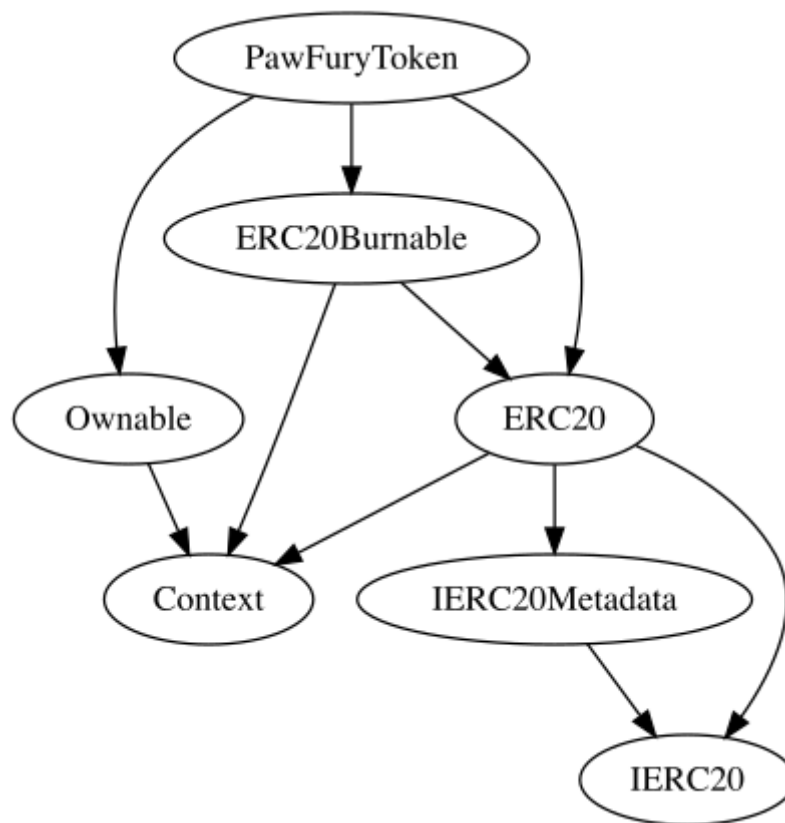
Recommendation

By adding the proper check, the contract will not allow the variables to be configured with zero value. This will ensure that the contract can handle all possible input values and avoid unexpected behavior or errors. Hence, it can help to prevent the contract from being exploited or operating unexpectedly.

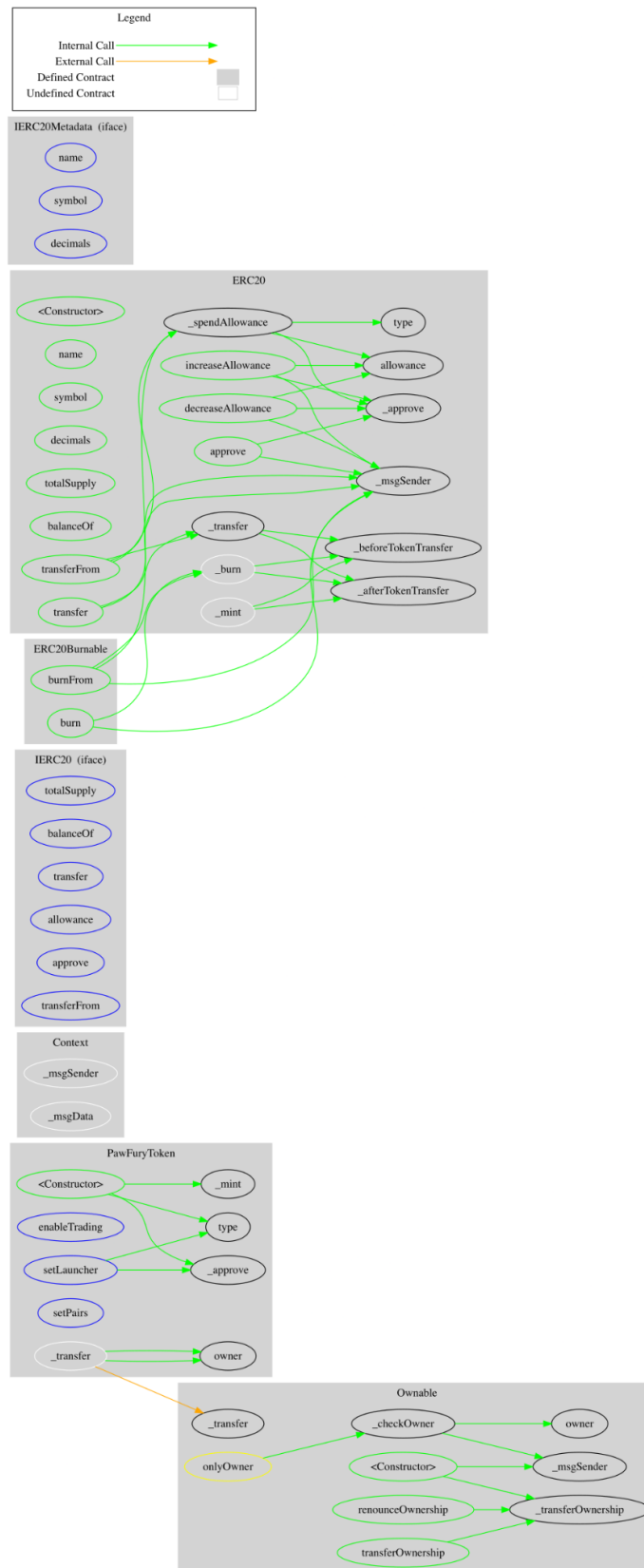
Functions Analysis

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
PawFuryToken	Implementation	ERC20, ERC20Burnable, Ownable		
		Public	✓	ERC20
	enableTrading	External	✓	onlyOwner
	setLauncher	External	✓	onlyOwner
	setPairs	External	✓	onlyOwner
	_transfer	Internal	✓	

Inheritance Graph



Flow Graph



Summary

PawFury contract implements a token mechanism. This audit investigates security issues, business logic concerns, and potential improvements. PawFury is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler errors or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions.

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About Cyberscope

Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



The Cyberscope team

<https://www.cyberscope.io>