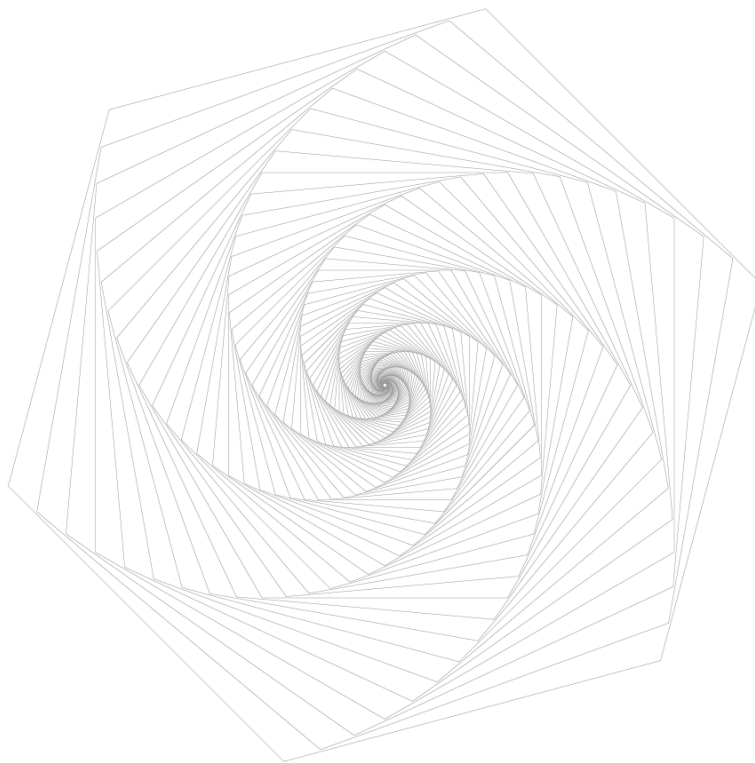




Smart Contract Audit Report



Version description

The revision	Date	Revised	Version
Write documentation	20211108	KNOWNSEC Blockchain Lab	V1.0

Document information

Title	Version	Document Number	Type
Galaxy War Smart Contract Audit Report	V1.0	101ad1e50dfd40698fa1a08f68f2 2af1	Open to project team

Statement

KNOWNSEC Blockchain Lab only issues this report for facts that have occurred or existed before the issuance of this report, and assumes corresponding responsibilities for this. KNOWNSEC Blockchain Lab is unable to determine the security status of its smart contracts and is not responsible for the facts that will occur or exist in the future. The security audit analysis and other content made in this report are only based on the documents and information provided to us by the information provider as of the time this report is issued. KNOWNSEC Blockchain Lab 's assumption: There is no missing, tampered, deleted or concealed information. If the information provided is missing, tampered with, deleted, concealed or reflected in the actual situation, KNOWNSEC Blockchain Lab shall not be liable for any losses and adverse effects caused thereby.

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1. Summarize

This report is valid from November 03, 2021 to November 09, 2021, during which time the **Galaxy WarToken, DarkMatter Token Code Security and Specification for galaxy War smart contracts** is audited and used as a statistical basis for the report.

The scope of this smart contract security audit does not include external contract calls, new attack methods that may appear in the future, and code after contract upgrades or tampering. (With the development of the project, the smart contract may add a new pool , New functional modules, new external contract calls, etc.), does not include front-end security and server security.

In this audit report, engineers conducted a comprehensive analysis of the common vulnerabilities of smart contracts (Chapter 6). **The smart contract code of the Galaxy War** is comprehensively assessed as **PASS**.

Since the testing is under non-production environment, all codes are the latest version. In addition, the testing process is communicated with the relevant engineer, and testing operations are carried out under the controllable operational risk to avoid production during the testing process, such as: Operational risk, code security risk.

KNOWNSEC Attest information:

classification	information
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2. Item information

2.1. Item description

Galaxy War is a Defi +NFT space strategy classic game on OKEX Chain – compete against thousands of other players for supreme control of the universe! Countless dangers and challenges lurk in the infinite depths of space – but so do unbelievable treasures and boundless power. Everything starts with the foundation of a small colony on an uninhabited planet. Harnessing the resources of your new home together with your own tactical genius, you research new technologies and construct a powerful fleet to carry your authority out into the stars.

2.2. The project's website

<http://www.galaxywar.io>

2.3. White Paper

<https://whitepaper.galaxywar.io/>

2.4. Review version code

<https://www.oklink.com/okexchain/address/0x5666e0bcef4db2ff775138d40d5058fb8630a3f4>

<https://www.oklink.com/okexchain/address/0x253c16dda6ff0c289f0469500875ce27e11e83fc>

2.5. Contract file and Hash/contract deployment address

The contract documents	MD5
GalaxyWarToken. sol	F8EC04B16FD22EA7BF8ECFB10E95A4BB
DarkMatter. sol	4794068730CC1C58ED86B92283AC2128

3. External visibility analysis

3.1. DarkMatter contracts

DarkMatter					
funcName	visibility	state changes	decorator	payable reception	instructions
transferFrom	public	True	---	---	---
_setGateway	internal	True	---	---	---
changeAdmin	external	True	onlyAdmin	---	---
removeAdmin	external	True	onlyAdmin	---	---
addMinters	public	True	onlyAdmin	---	---
removeMinters	public	True	onlyAdmin	---	---
mint	public	True	onlyMinter	---	---

3.2. GalaxyWarToken contracts

GalaxyWarToken					
funcName	visibility	state changes	decorator	payable reception	instructions
isContract	internal	False	---	---	---
renounceOwnership	public	True	onlyOwner	---	---
transferOwnership	public	True	onlyOwner	---	---
delegateByType	external	True	---	---	---
delegate	external	True	---	---	---
getDelegateeByType	external	False	---	---	---
getPowerCurrent	external	False	---	---	---
_getDelegatee	internal	False	---	---	---

addToTokenTransferAllowlist	external	True	onlyOwner	---	---
removeFromTokenTransferAllowlist	external	True	onlyOwner	---	---
permit	external	True	---	---	---
nonces	external	False	---	---	---
transfer	public	True	---	---	---
delegateByTypeBySig	public	True	---	---	---

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4. Code vulnerability analysis

4.1. Summary description of the audit results

Audit results			
audit project	audit project	audit project	audit project
Business security detection	DarkMatter.sol contract administrator-related features	Pass	After testing, there is no security issue.
	DarkMatter.sol contract mint rights related features	Pass	After testing, there is no security issue.
	DarkMatter.sol contract mint function	Reminder	After testing, there is no security issue.
	The GalaxyWar.sol contract authorizes delegated functions	Pass	After testing, there is no security issue.
	GalaxyWar.sol contract token trading related features	Pass	After testing, there is no security issue.
	GalaxyWar.sol contract authorization function	Pass	After testing, there is no security issue.
	Snapshot feature before	Pass	After testing, there is no security issue.

	GalaxyWar.sol contract transfer		
Code basic vulnerability detection	Compiler version security	Pass	After testing, there is no security issue.
	Redundant code	Pass	After testing, there is no security issue.
	Use of safe arithmetic library	Pass	After testing, there is no security issue.
	Not recommended encoding	Pass	After testing, there is no security issue.
	Reasonable use of require/assert	Pass	After testing, there is no security issue.
	fallback function safety	Pass	After testing, there is no security issue.
	tx.origin authentication	Pass	After testing, there is no security issue.
	Owner permission control	Pass	After testing, there is no security issue.
	Gas consumption detection	Pass	After testing, there is no security issue.
	call injection attack	Pass	After testing, there is no security issue.
	Low-level function safety	Pass	After testing, there is no security issue.
	Vulnerability of additional token issuance	Reminder	After testing, there is no security issue.
	Access control defect detection	Pass	After testing, there is no security issue.
	Numerical overflow detection	Pass	After testing, there is no security issue.
	Arithmetic accuracy error	Pass	After testing, there is no security issue.

	Wrong use of random number detection	Pass	After testing, there is no security issue.
	Unsafe interface use	Pass	After testing, there is no security issue.
	Variable coverage	Pass	After testing, there is no security issue.
	Uninitialized storage pointer	Pass	After testing, there is no security issue.
	Return value call verification	Pass	After testing, there is no security issue.
	Transaction order dependency detection	Pass	After testing, there is no security issue.
	Timestamp dependent attack	Pass	After testing, there is no security issue.
	Denial of service attack detection	Pass	After testing, there is no security issue.
	Fake recharge vulnerability detection	Pass	After testing, there is no security issue.
	Reentry attack detection	Pass	After testing, there is no security issue.
	Replay attack detection	Pass	After testing, there is no security issue.
	Rearrangement attack detection	Pass	After testing, there is no security issue.

5. Business security detection

5.1. DarkMatter.sol contract administrator-related features

【Pass】

Audit Analysis: The contract's changeAdmin function is used to change administrators, and the removeAdmin function is used to remove all administrators, and the function has the correct permissions and no obvious security issues are found.

```
function changeAdmin(address _newAdmin) external onlyAdmin {
    require(_newAdmin != address(0), "HasAdmin: new admin is the zero address");
    emit AdminChanged(admin, _newAdmin);
    admin = _newAdmin; //knownsec//Change the new administrator
}

function removeAdmin() external onlyAdmin {
    emit AdminRemoved(admin);
    admin = address(0); //knownsec//Delete all administrators
}
```

Security advice: None.

5.2. DarkMatter.sol contract mint rights related features

【Pass】

Audit Analysis: The contract's addMinters function is used to add mint permissions, the removeMinters function is used to remove mints, and the isMinter function is used to determine whether a mint permission is available. The function has correct permissions and no obvious security problems have been found.

```
modifier onlyMinter {
    require(minter[msg.sender]); //knownsec//Decorator to determine mint permissions
}
```

```

    _;
}

function addMinters(address[] memory _addedMinters) public onlyAdmin {
    address _minter;
    for (uint256 i = 0; i < _addedMinters.length; i++) {//knownsec // Add mint permissions in bulk
        _minter = _addedMinters[i];
        if (!minter[_minter]) {
            minters.push(_minter);
            minter[_minter] = true;
            emit MinterAdded(_minter);
        }
    }
}

function removeMinters(address[] memory _removedMinters) public onlyAdmin {
    address _minter;
    for (uint256 i = 0; i < _removedMinters.length; i++) {//knownsec // Bulk delete mint permissions
        _minter = _removedMinters[i];
        if (minter[_minter]) {
            minter[_minter] = false;
            emit MinterRemoved(_minter);
        }
    }
    uint256 i = 0;
    while (i < minters.length) {
        _minter = minters[i];
        if (!minter[_minter]) {
            minters[i] = minters[minters.length - 1];
            delete minters[minters.length - 1];
            minters.length--;
        } else {
            i++;
        }
    }
}

```

```
    }  
  }  
}  
  
function isMinter(address _addr) public view returns (bool) {  
    return minter[_addr];//knownsec // Determine whether you have the right to mint based on the  
Boolean value returned  
}
```

Security advice: None.

5.3. DarkMatter.sol contract mint function **【Reminder】**

Audit Analysis: The mint function of the contract is used to mint Dark tokens, which are local game currencies used to acquire buildings, ships, crews, and equipment. This function allows administrators to issue unlimited issues of Dark tokens, but according to the rules of the white paper, this behavior conforms to business logic and is therefore adopted.

```
function mint(address _to, uint256 _value) public onlyMinter returns (bool _success) {  
    return _mint(_to, _value);  
}  
  
function _mint(address _to, uint256 _value) internal returns (bool success) {  
    totalSupply = totalSupply.add(_value);//knownsec // Increase the total amount of tokens  
    balanceOf[_to] = balanceOf[_to].add(_value);//knownsec // Increase the token balance  
    emit Transfer(address(0), _to, _value);  
    return true;  
}
```

Security advice: None.

5.4. The GalaxyWar.sol contract authorizes delegated functions **【Pass】**

Audit Analysis: The contract's delegate function is used to delegate all governance power to the principal, _delegateByType function is used to delegate specific power to the principal, and _moveDelegatesByType function is used to transfer power.

```
function delegate(address delegatee) external override{
    _delegateByType(msg.sender, delegatee, DelegationType.VOTING_POWER);
    _delegateByType(msg.sender, delegatee, DelegationType.PROPOSITION_POWER);
}

function _delegateByType(address delegator,address delegatee,DelegationType delegationType)
internal{
    require(delegatee != address(0),'INVALID_DELEGATEE');
    (
        ,
        ,mapping(address=>address) storage delegates) =
_getDelegationDataByType(delegationType);
    uint256 delegatorBalance = balanceOf(delegator);
    address previousDelegatee = _getDelegatee(delegator, delegates);
    delegates[delegator] = delegatee;
    _moveDelegatesByType(previousDelegatee, delegatee, delegatorBalance, delegationType);
    emit DelegateChanged(delegator, delegatee, delegationType);
}

function _moveDelegatesByType(address from,address to,uint256 amount, DelegationType
delegationType) internal{
    if (from == to) {
        return;
    }
    (mapping(address => mapping(uint256 => Snapshot)) storage snapshots,mapping(address =>
uint256) storage snapshotsCounts,) = _getDelegationDataByType(delegationType);
```



```
if (from != address(0)) {
    uint256 previous = 0;
    uint256 fromSnapshotsCount = snapshotsCounts[from];
    if (fromSnapshotsCount != 0) {
        previous = snapshots[from][fromSnapshotsCount - 1].value;
    } else {
        previous = balanceOf(from);
    }
    uint256 newAmount = previous.sub(amount);
    _writeSnapshot(snapshots, snapshotsCounts, from, uint128(newAmount));
    emit DelegatedPowerChanged(from, newAmount, delegationType);
}
if (to != address(0)) {
    uint256 previous = 0;
    uint256 toSnapshotsCount = snapshotsCounts[to];
    if (toSnapshotsCount != 0) {
        previous = snapshots[to][toSnapshotsCount - 1].value;
    } else {
        previous = balanceOf(to);
    }
    uint256 newAmount = previous.add(amount);
    _writeSnapshot(snapshots, snapshotsCounts, to, uint128(newAmount));
    emit DelegatedPowerChanged(to, newAmount, delegationType);
}
}
```

Security advice: None.

5.5. GalaxyWar.sol contract token trading related features

【Pass】

Audit Analysis: The contract's add-TotokenTransferAllowlist function is used to

add token trading permissions, and the `removeFromTokenTransferAllowlist` function is used to remove token trading permissions. The function has correct permissions and no obvious security problems have been found.

```
function addToTokenTransferAllowlist(address[] calldata addressesToAdd) external onlyOwner{
    for (uint256 i = 0; i < addressesToAdd.length; i++) {
        require(!_tokenTransferAllowlist[addressesToAdd[i]], 'ADDRESS_EXISTS_IN_TRANSFER_ALLOWLIST');
        _tokenTransferAllowlist[addressesToAdd[i]] = true; //knownsec // Add addresses to the whitelist
        emit TransferAllowlistUpdated(addressesToAdd[i], true);
    }
}

function removeFromTokenTransferAllowlist(address[] calldata addressesToRemove) external onlyOwner{
    for (uint256 i = 0; i < addressesToRemove.length; i++) {
        require(_tokenTransferAllowlist[addressesToRemove[i]], 'ADDRESS_DOES_NOT_EXIST_IN_TRANSFER_ALLOWLIST');
        _tokenTransferAllowlist[addressesToRemove[i]] = false; //knownsec
        emit TransferAllowlistUpdated(addressesToRemove[i], false);
    }
}
```

Security advice: None.

5.6. GalaxyWar.sol contract authorization function **【Pass】**

Audit analysis: The `permit` function of the contract is used to replace the authorization function of ERC-20, and the authorization transfer is realized by checking the signature, and the `nonces` function is used to check the nonces value to ensure that

the signature is used only once. The function has correct permissions and no obvious security problems have been found.

```
function permit(address owner,address spender,uint256 value,uint256 deadline,uint8 v,bytes32
r,bytes32 s) external{
    require(owner != address(0),'INVALID_OWNER');
    require(block.timestamp <= deadline,'INVALID_EXPIRATION');
    uint256 currentValidNonce = _nonces[owner];
    bytes32 digest = keccak256(abi.encodePacked("\x19\x01',DOMAIN_SEPARATOR,
    keccak256(abi.encode(PERMIT_TYPEHASH, owner, spender, value, currentValidNonce,
    deadline))));
    require(owner == ecrecover(digest, v, r, s),'INVALID_SIGNATURE');
    _nonces[owner] = currentValidNonce.add(1);
    _approve(owner, spender, value);
}

function nonces(address owner) external view returns (uint256){
    return _nonces[owner];//knownsec // The nonces value is returned through an address query
}
```

Security advice: None.

5.7. Snapshot feature before GalaxyWar.sol contract transfer **【Pass】**

Audit analysis: The `_beforeTokenTransfer` function of the contract is used to take snapshots before transferring tokens, coins and coins, and the function function has correct permissions and no obvious security problems have been found.

```
function _beforeTokenTransfer(address from,address to,uint256 amount) internal override{
    address votingFromDelegatee = _getDelegatee(from, _votingDelegates);
    address votingToDelegatee = _getDelegatee(to, _votingDelegates);
```

```
_moveDelegatesByType(votingFromDelegatee,votingToDelegatee,amount,DelegationType.VOT  
ING_POWER);//knwonsec // Transfer delegates according to type  
address propPowerFromDelegatee = _getDelegatee(from, _propositionPowerDelegates);  
address propPowerToDelegatee = _getDelegatee(to, _propositionPowerDelegates);  
_moveDelegatesByType(propPowerFromDelegatee,propPowerToDelegatee,amount,Delegation  
Type.PROPOSITION_POWER);  
}
```

Security advice: None.

6. Code basic vulnerability detection

6.1. Compiler version security **【Pass】**

Check to see if a secure compiler version is used in the contract code implementation.

Detection results: After detection, the smart contract code has developed a compiler version of 0.7.5 or more, there is no security issue.

Security advice: None.

6.2. Redundant code **【Pass】**

Check that the contract code implementation contains redundant code.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.3. Use of safe arithmetic library **【Pass】**

Check to see if the SafeMath security abacus library is used in the contract code implementation.

Detection results: The SafeMath security abacus library has been detected in the smart contract code and there is no such security issue.

Security advice: None.

6.4. Not recommended encoding **【Pass】**

Check the contract code implementation for officially uns recommended or deprecated coding methods.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.5. Reasonable use of require/assert **【Pass】**

Check the reasonableness of the use of require and assert statements in contract code implementations.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.6. Fallback function safety **【Pass】**

Check that the fallback function is used correctly in the contract code implementation.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.7. tx.origin authentication **【Pass】**

tx.origin is a global variable of Solidity that traverses the entire call stack and returns the address of the account that originally sent the call (or transaction). Using this variable for authentication in smart contracts makes contracts vulnerable to phishing-like attacks.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.8. Owner permission control **【Pass】**

Check that the owner in the contract code implementation has excessive permissions. For example, modify other account balances at will, and so on.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.9. Gas consumption detection **【Pass】**

Check that the consumption of gas exceeds the maximum block limit.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.10. call injection attack **【Pass】**

When a call function is called, strict permission control should be exercised, or the function called by call calls should be written directly to call calls.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.11. Low-level function safety **【Pass】**

Check the contract code implementation for security vulnerabilities in the use of call/delegatecall

The execution context of the call function is in the contract being called, while the execution context of the delegatecall function is in the contract in which the function is currently called.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.12. Vulnerability of additional token issuance **【Reminder】**

Check to see if there are functions in the token contract that might increase the total token volume after the token total is initialized.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.13. Access control defect detection **【Pass】**

Different functions in the contract should set reasonable permissions, check whether the functions in the contract correctly use public, private and other keywords for visibility modification, check whether the contract is properly defined and use modifier access restrictions on key functions, to avoid problems caused by overstepping the authority.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.14. Numerical overflow detection **【Pass】**

The arithmetic problem in smart contracts is the integer overflow and integer overflow, with Solidity able to handle up to 256 digits ($2^{256}-1$), and a maximum number increase of 1 will overflow to get 0. Similarly, when the number is an unsigned type, 0 minus 1 overflows to get the maximum numeric value.

Integer overflows and underflows are not a new type of vulnerability, but they are particularly dangerous in smart contracts. Overflow conditions can lead to incorrect results, especially if the likelihood is not anticipated, which can affect the reliability and safety of the program.

Detection results: The security issue is not present in the smart contract code after

detection.

Security advice: None.

6.15. Arithmetic accuracy error **【Pass】**

Solidity has a data structure design similar to that of a normal programming language, such as variables, constants, arrays, functions, structures, and so on, and there is a big difference between Solidity and a normal programming language - Solidity does not have floating-point patterns, and all of Solidity's numerical operations result in integers, without the occurrence of decimals, and without allowing the definition of decimal type data. Numerical operations in contracts are essential, and numerical operations are designed to cause relative errors, such as sibling operations: $5/2 \times 10 \times 20$, and $5 \times 10/2 \times 25$, resulting in errors, which can be greater and more obvious when the data is larger.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.16. Incorrect use of random numbers **【Pass】**

Random numbers may be required in smart contracts, and while the functions and variables provided by Solidity can access significantly unpredictable values, such as `block.number` and `block.timestamp`, they are usually either more public than they seem, or are influenced by miners, i.e. these random numbers are somewhat predictable, so

malicious users can often copy it and rely on its unpredictability to attack the feature.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.17. Unsafe interface usage **【Pass】**

Check the contract code implementation for unsafe external interfaces, which can be controlled, which can cause the execution environment to be switched and control contract execution arbitrary code.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.18. Variable coverage **【Pass】**

Check the contract code implementation for security issues caused by variable overrides.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.19. Uninitialized storage pointer **【Pass】**

A special data structure is allowed in solidity as a strut structure, while local

variables within the function are stored by default using stage or memory.

The existence of store (memory) and memory (memory) is two different concepts, solidity allows pointers to point to an uninitialized reference, while uninitialized local stage causes variables to point to other stored variables, resulting in variable overrides, and even more serious consequences, and should avoid initializing the task variable in the function during development.

Detection results: After detection, the smart contract code does not have the problem.

Security advice: None.

6.20. Return value call verification **【Pass】**

This issue occurs mostly in smart contracts related to currency transfers, so it is also known as silent failed sending or unchecked sending.

In Solidity, there are transfer methods such as `transfer()`, `send()`, `call.value()`, which can be used to send tokens to an address, the difference being: transfer send failure will be throw, and state rollback; `Call.value` returns false when it fails to send, and passing all available gas calls (which can be restricted by incoming `gas_value` parameters) does not effectively prevent reentrance attacks.

If the return values of the `send` and `call.value` transfer functions above are not checked in the code, the contract continues to execute the subsequent code, possibly with unexpected results due to token delivery failures.

Detection results: The security issue is not present in the smart contract code after

detection.

Security advice: None.

6.21. Transaction order dependency **【Pass】**

Because miners always get gas fees through code that represents an externally owned address (EOA), users can specify higher fees to trade faster. Since blockchain is public, everyone can see the contents of other people's pending transactions. This means that if a user submits a valuable solution, a malicious user can steal the solution and copy its transactions at a higher cost to preempt the original solution.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.22. Timestamp dependency attack **【Pass】**

Block timestamps typically use miners' local time, which can fluctuate over a range of about 900 seconds, and when other nodes accept a new chunk, they only need to verify that the timestamp is later than the previous chunk and has a local time error of less than 900 seconds. A miner can profit from setting the timestamp of a block to meet as much of his condition as possible.

Check the contract code implementation for key timestamp-dependent features.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.23. Denial of service attack **【Pass】**

Smart contracts that are subject to this type of attack may never return to normal operation. There can be many reasons for smart contract denial of service, including malicious behavior as a transaction receiver, the exhaustion of gas caused by the artificial addition of the gas required for computing functionality, the misuse of access control to access the private component of smart contracts, the exploitation of confusion and negligence, and so on.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.24. Fake recharge vulnerability **【Pass】**

The transfer function of the token contract checks the balance of the transfer initiator (msg.sender) in the if way, when the balances < value enters the else logic part and return false, and ultimately does not throw an exception, we think that only if/else is a gentle way of judging in a sensitive function scenario such as transfer is a less rigorous way of coding.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.25. Reentry attack detection **【Pass】**

The `call.value()` function in Solidity consumes all the gas it receives when it is used to send tokens, and there is a risk of re-entry attacks when the call to the call tokens occurs before the balance of the sender's account is actually reduced.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.26. Replay attack detection **【Pass】**

If the requirements of delegate management are involved in the contract, attention should be paid to the non-reusability of validation to avoid replay attacks

In the asset management system, there are often cases of entrustment management, the principal will be the assets to the trustee management, the principal to pay a certain fee to the trustee. This business scenario is also common in smart contracts.

Detection results: The security issue is not present in the smart contract code after detection.

Security advice: None.

6.27. Rearrangement attack detection **【Pass】**

A reflow attack is an attempt by a miner or other party to "compete" with a smart contract participant by inserting their information into a list or mapping, giving an attacker the opportunity to store their information in a contract.

Detection results: After detection, there are no related vulnerabilities in the smart contract code.

Security advice: None.

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7. Appendix A: Security Assessment of Contract Fund Management

Contract fund management		
The type of asset in the contract	The type of asset in the contract	The type of asset in the contract
The user mortgages the platform currency assets	transferFrom、_mint、_burn、 addToTokenTransferAllowlist、 removeFromTokenTransferAllowlist	SAFE

Check the security of the management of **digital currency assets** transferred by users in the business logic of the contract. Observe whether there are security risks that may cause the loss of customer funds, such as **incorrect recording, incorrect transfer, and backdoor** withdrawal of the **digital currency assets** transferred into the contract.



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