

Security Assessment

## **Gempad Ultimate Token**

Verified on 05/31/2023



#### **SUMMARY**

Project	CHAIN			METHODOLOGY			
Gempad Ultimate	Token				Manual & Automatic Analysis		
FILES Single		DELIVERY 05/31/2023			TYPE Standard Audit		
	0	0	0	0	0	0	
	Total Findings C	Critical	Major	Medium	Minor	Informational	
0 Critical	0 Pending				An exposure that functions in seve disrupt the contra	can affect the contract ral events that can risk and act	
0 Major	0 Pending				when using the c	can affect the outcome ontract that can serve as nipulating the contract in oner	
0 Medium	0 Pending				An opening that of executing the consituation	could affect the outcome in intract in a specific	
0 Minor	0 Pending				An opening but d	oesn't have an impact on of the contract	
0 Information	al 0 Pending			An opening that consists information but will not risk or affect the contract			
STATUS	<b>√</b> AUDIT	PASS	ED				



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## **DISCLAIMER** Gempad Ultimate Token

<u>ContractWolf</u> audits and reports should not be considered as a form of project's "Advertisement" and does not cover any interaction and assessment from "Project Contract" to "External Contracts" such as PancakeSwap, UniSwap, SushiSwap or similar.

**ContractWolf** does not provide any <u>warranty</u> on its released report and should not be used as a <u>decision</u> to invest into audited projects.

**ContractWolf** provides a transparent report to all its "Clients" and to its "Clients Participants" and will not claim any guarantee of bug-free code within its **SMART CONTRACT**.

**ContractWolf**'s presence is to analyze, audit and assess the Client's Smart Contract to find any underlying risk and to eliminate any logic and flow errors within its code.

Each company or project should be liable to its security flaws and functionalities.



## SCOPE OF WORK Gempad Ultimate Token

**Gempad Ultimate Token** team has agreed and provided us with the files that need to be tested (*Github, BSCscan, Etherscan, Local files etc*). The scope of audit is the main contract.

The goal of this engagement is to identify if there is a possibility of security flaws in the implementation of smart contract and its systems.

ContractWolf will be focusing on contract issues and functionalities along with the project claims from smart contract to their website, whitepaper, repository which has been provided by **Gempad Ultimate Token**.



### AUDITING APPROACH Gempad Ultimate Token

Every line of code along with its functionalities will undergo manual review to check for security issues, quality of logic and contract scope of inheritance. The manual review will be done by our team that will document any issues that they discovered.

#### **METHODOLOGY**

The auditing process follows a routine series of steps:

- 1. Code review that includes the following:
- Review of the specifications, sources and instructions provided to ContractWolf to make sure we understand the size, scope and functionality of the smart contract.
- Manual review of code. Our team will have a process of reading the code line-by-line with the intention of identifying potential vulnerabilities, underlying and hidden security flaws.
- 2. Testing and automated analysis that includes:
- Testing the smart contract function with common test cases and scenarios to ensure that it returns the expected results.
- 3. Best practices and ethical review. The team will review the contract with the aim to improve efficiency, effectiveness, clarifications, maintainability, security and control within the smart contract.
- 4. Recommendations to help the project take steps to eliminate or minimize threats and secure the smart contract.



## TOKEN DETAILS Gempad Ultimate Token



This token is available only on Gempad's Token Generator.

Token Na	ame	Symbol	Decimal	Total Supply	Chain
_		_	_	_	

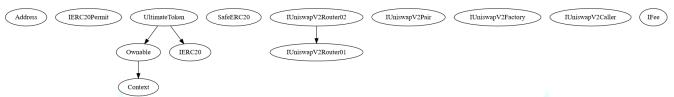
### **SOURCE**

Source Sent Via local-files



## INHERITANCE GRAPH Gempad Ultimate Token

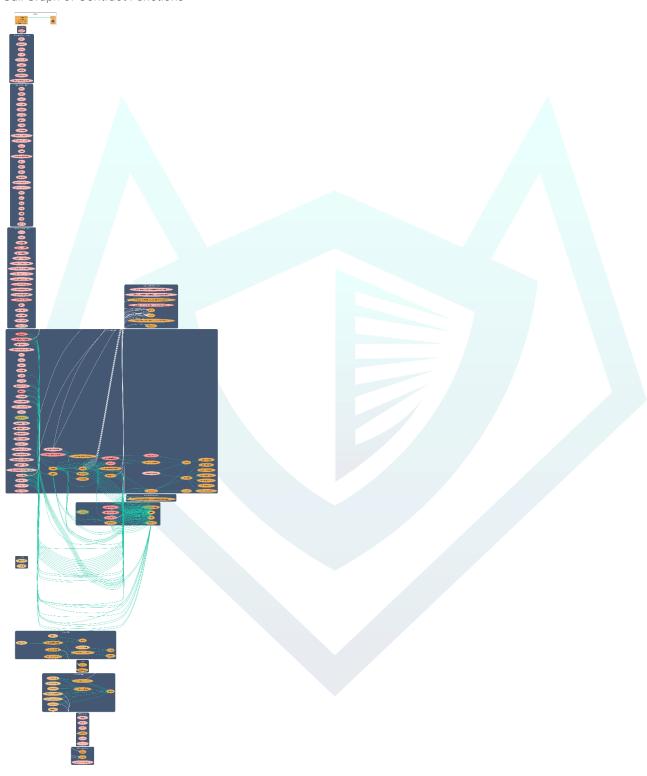
Inheritance Graph of Contract Functions





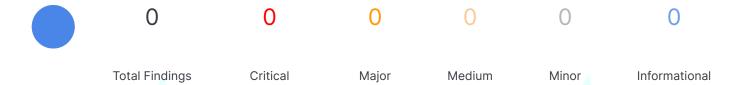
## CALL GRAPH Gempad Ultimate Token

Call Graph of Contract Functions





## FINDINGS Gempad Ultimate Token



This report has been prepared to state the issues and vulnerabilities for Gempad Ultimate Token through this audit. The goal of this report findings is to identify specifically and fix any underlying issues and errors

ID	Title	File & Lir	ne #	Severity	Status	3
N/A	N/A	N/A		N/A	•	N/A



## **SWC ATTACKS** Gempad Ultimate Token

Smart Contract Weakness Classification and Test Cases

ID	Description	Status
SWC-100	Function Default Visibility	<ul> <li>Passed</li> </ul>
SWC-101	Integer Overflow and Underflow	<ul> <li>Passed</li> </ul>
SWC-102	Outdated Compiler Version	<ul> <li>Passed</li> </ul>
SWC-103	Floating Pragma	<ul> <li>Passed</li> </ul>
SWC-104	Unchecked Call Return Value	<ul> <li>Passed</li> </ul>
SWC-105	Unprotected Ether Withdrawal	<ul> <li>Passed</li> </ul>
SWC-106	Unprotected SELF DESTRUCT Instruction	<ul> <li>Passed</li> </ul>
SWC-107	Reentrancy	<ul> <li>Passed</li> </ul>
SWC-108	State Variable Default Visibility	<ul> <li>Passed</li> </ul>
SWC-109	Uninitialized Storage Pointer	<ul> <li>Passed</li> </ul>
SWC-110	Assert Violation	<ul> <li>Passed</li> </ul>
SWC-111	Use of Deprecated Solidity Functions	<ul> <li>Passed</li> </ul>
SWC-112	Delegatecall to Untrusted Callee	<ul> <li>Passed</li> </ul>
SWC-113	DoS with Failed Call	<ul> <li>Passed</li> </ul>
SWC-114	Transaction Order Dependence	<ul> <li>Passed</li> </ul>
SWC-115	Authorization through tx.origin	<ul> <li>Passed</li> </ul>
SWC-116	Block values as a proxy for time	<ul> <li>Passed</li> </ul>
SWC-117	Signature Malleability	<ul> <li>Passed</li> </ul>
SWC-118	Incorrect Constructor Name	<ul> <li>Passed</li> </ul>
SWC-119	Shadowing State Variables	<ul> <li>Passed</li> </ul>
SWC-120	Weak Sources of Randomness from Chain Attributes	<ul> <li>Passed</li> </ul>
SWC-121	Missing Protection against Signature Replay Attacks	<ul> <li>Passed</li> </ul>
SWC-122	Lack of Proper Signature Verification	<ul> <li>Passed</li> </ul>



ID	Description	Status
SWC-123	Requirement Violation	<ul> <li>Passed</li> </ul>
SWC-124	Write to Arbitrary Storage Location	<ul> <li>Passed</li> </ul>
SWC-125	Incorrect Inheritance Order	<ul> <li>Passed</li> </ul>
SWC-126	Insufficient Gas Griefing	<ul> <li>Passed</li> </ul>
SWC-127	Arbitrary Jump with Function Type Variable	<ul><li>Passed</li></ul>
SWC-128	DoS With Block Gas Limit	<ul><li>Passed</li></ul>
SWC-129	Typographical Error	<ul><li>Passed</li></ul>
SWC-130	Right-To-Left-Override control character(U+202E)	<ul><li>Passed</li></ul>
SWC-131	Presence of unused variables	<ul><li>Passed</li></ul>
SWC-132	Unexpected Ether balance	<ul><li>Passed</li></ul>
SWC-133	Hash Collisions With Multiple Variable Arguments	<ul><li>Passed</li></ul>
SWC-134	Message call with hardcoded gas amount	<ul><li>Passed</li></ul>
SWC-135	Code With No Effects	<ul><li>Passed</li></ul>
SWC-136	Unencrypted Private Data On-Chain	<ul> <li>Passed</li> </ul>



### **CW ASSESSMENT** Gempad Ultimate Token

ContractWolf Vulnerability and Security Tests

ID	Name	Description	Status
CW-001	Multiple Version	Presence of multiple compiler version across all contracts	<b>V</b>
CW-002	Incorrect Access Control	Additional checks for critical logic and flow	<b>V</b>
CW-003	Payable Contract	A function to withdraw ether should exist otherwise the ether will be trapped	<b>V</b>
CW-004	Custom Modifier	major recheck for custom modifier logic	<b>V</b>
CW-005	Divide Before Multiply	Performing multiplication before division is generally better to avoid loss of precision	<b>V</b>
CW-006	Multiple Calls	Functions with multiple internal calls	<b>V</b>
CW-007	Deprecated Keywords	Use of deprecated functions/operators such as block.blockhash() for blockhash(), msg.gas for gasleft(), throw for revert(), sha3() for keccak256(), callcode() for delegatecall(), suicide() for selfdestruct(), constant for view or var for actual type name should be avoided to prevent unintended errors with newer compiler versions	<b>V</b>
CW-008	Unused Contract	Presence of an unused, unimported or uncalled contract	V
CW-009	Assembly Usage	Use of EVM assembly is error-prone and should be avoided or double-checked for correctness	<b>V</b>
CW-010	Similar Variable Names	Variables with similar names could be confused for each other and therefore should be avoided	V
CW-011	Commented Code	Removal of commented/unused code lines	V
CW-012	SafeMath Override	SafeMath is no longer needed starting Solidity v0.8+. The compiler now has Built in overflow checking.	<b>V</b>



### **FIXES & RECOMMENDATION**

No Issues | Clean Contract

N/A





## AUDIT COMMENTS Gempad Ultimate Token

Smart Contract audit comment for a non-technical perspective

- Contract is not pausable
- Owner can renounce and transfer ownership
- Owner cannot burn tokens
- Owner cannot mint after initial deployment
- Owner cannot set max transaction limit
- Owner cannot block users
- Owner can include/exclude addresses from fees and rewards
- Owner can take BNB & Tokens from the contract



# CONTRACTWOLF

**Blockchain Security - Smart Contract Audits**