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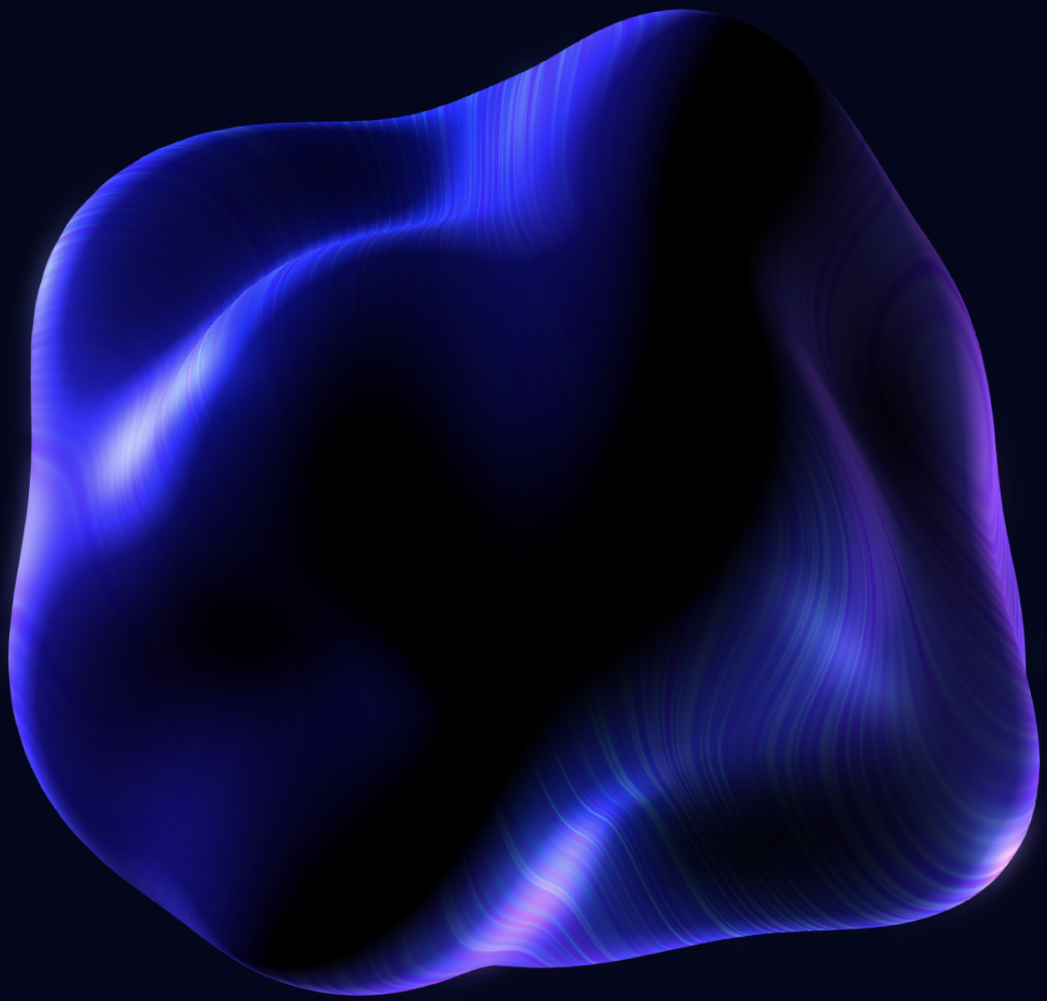
Deployment Check



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MAHADAO Governance deployment check

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The report containing confidential information can be used internally by the Customer, or it can be disclosed publicly after all vulnerabilities are fixed — upon a decision of the Customer.

Reference information

Name	MAHADAO Governance Contracts
Language	Solidity
Chain	Ethereum mainnet
Website	https://mahadao.com/
Documentation	https://docs.mahadao.com/
Reference repositories	https://github.com/MahaDAO/governance-contracts https://github.com/MahaDAO/token

Deployment check summary for MahaDAO governance

Codebase inconsistency issues

Type	Severity
In deployed contracts	**LOW**
Smart contracts vs Git	**HIGH**
In dependencies of codebase	**MEDIUM**

Storage analysis

Type	# Issues
Found Total	**20**
Found Critical	**4**
Left as acknowledged after re-checks	**0**
Left as Critical after re-checks	**0**

Deployment check is expert review of the storage and codebase consistency of a deployed project*

Deployed Smart contracts and/or Git repos

&

Contract storage

Deployment check is especially important for projects with active development and regular updates to ensure that after all incremental updates, the set of contracts and their settings are consistent. It includes two rechecks.

Deployment check protects against

Errors in CI/CD, especially in large projects

Potential attacks from people with access to the codebase

Large number of human errors during updates of the project in the network

Incorrect cross-references between smart contracts

Relation to old versions of contracts

Forgotten role members

Uncorrected ownership

*Note that security audit is not the part of this review

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Deployment check timeline

date	stage
14.01.2023	scope of work settled
15.01.2023 23.01.2023	initial check
24.01.2023	presentation to the client
15.02.2023 27.02.2023	first re-check
28.02.2023	presentation to the client
03.04.2023 09.04.2023	second re-check
10.04.2023	presentation to the client

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Scope of work

contract	address
BaseV2Bribes	0x8f362e16a74c2eb564bfbf24dc73bd5ce37d9063
BaseV2Voter *Proxy*	0x227a445ff220cc9c3584fe77b7dfef6af0b63e8e 0xeb99748e91afca94a6289db3b02e7ef4a8f0a22d
EmissionController	0xbd86a195c90cec4606dbc378ea0aa338f674a704
FeesSplitter	0x9032f1bd0cc645fde1b41941990da85f265a7623
GaugeLP *Proxy*	0xd2125a722d28c7685aed658a3ddc7b08275b8aeb 0x9ee8110c0aacb7f9147252d7a2d95a5ff52f8496
GaugeUniswapV3 *Proxy*	0xa7af7eaa2bf2fbea3fdb90db1a820508ed3f037c 0x98e1701f6558dd63481b57926c9f22c64d918c35
GnosisSafe-1 *Proxy*	0x34cfac646f301356faa8b21e94227e3583fe3f5f 0x6357edbfe5ada570005ceb8fad3139ef5a8863cc
GnosisSafe-2 *Proxy*	0xd9db270c1b5e3bd161e8c8503c55ceabee709552 0x516bd18ba17f70f08c8c91fe7f9ee2105dc275d2
MAHATimelockController-14	0x43c958affe41d44f0a02ae177b591e93c86adbea
MAHATimelockController-30	0xb45021f5313b93927699aae6cbe989bccf6b5900
MahaToken	0x745407c86df8db893011912d3ab28e68b62e49b0
MAHAXGovernor	0xe7d23c2b3e9148c46cec796f018842ab72d5867f
MAHAXLocker	0xbdd8f4daf71c2cb16cce7e54bb81ef3cfcf5aacb
MAHAXStaker	0x608917f8392634428ec71c6766f3ec3f5cc8f421
MAHAXVetoGovernor	0x9a7e7b4c2abe3255dec67e3bf2e6b24b46223111
Registry	0x2684861ba9dada685a11c4e9e5aed8630f08afe0
RenderingContract	0x9d348281e16218cd8ede9cd8a1bca74e89b410e8

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Findings summary

Storage findings

contract	storage issues initial check	storage issues first re-check	storage issues second re-check
BaseV2Bribes	found	none	--
BaseV2Voter	found	none	--
EmissionController	found	none	--
FeesSplitter	none	--	--
GaugeLP	none	--	--
GaugeUniswapV3	found	none	--
GnosisSafe-1	none	--	--
GnosisSafe-2	none	--	--
MAHATimelockController-14	found **2 criticals**	none	--
MAHATimelockController-30	found	none	--
MahaToken	found	none	--
MAHAXGovernor	found **1 critical**	none	--
MAHAXLocker	found	none	--
MAHAXStaker	found **1 critical**	found	none
MAHAXVetoGovernor	none	--	--
Registry	none	--	--
RenderingContract	none	--	--

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Source code findings

name	severity
Inconsistency between the same project files across contracts	Low
Searching for the original commit in the client's repository	High
Analyzing the dependencies of the contracts	Medium

Deployment check: source code

This analysis aims to identify any differences or inconsistencies in the source code of the smart contracts. We perform the analysis in three steps:

1. Analyzing for inconsistency between source code files across deployed smart contracts (excluding well-known dependencies such as OpenZeppelin or Uniswap).
2. Looking for the original commit in the client's repository, which represents all source code of deployed smart contracts in the case of providing the client's git
3. Analyzing the dependencies of the contracts

See number of files statistics in section A1.

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Inconsistency between the same project files across contracts (excluding dependencies)

The goal is to check for any differences and inconsistencies in the source code of the same parts of the contracts. We compare each pair of smart contracts in the scope of work (SoW). Files with the same name and relative path included (imported) in both contracts should have the same content.

#	contract-1	contract-2	path	comment
1	MAHAXLocker	BaseV2Bribes	contracts/interfaces/INFTLocker.sol	see diffs. 1-4 below
2	MAHAXLocker	GaugeLP	contracts/interfaces/INFTLocker.sol	see diffs. 1-4 below
3	MAHAXStaker	BaseV2Bribes	contracts/interfaces/INFTLocker.sol	see diffs. 1-4 below
4	MAHAXStaker	GaugeLP	contracts/interfaces/INFTLocker.sol	see diffs. 1-4 below
5	MAHAXStaker	BaseV2Voter	contracts/interfaces/IGaugeVoterV2.sol	see diffs. 5-7 below
6	MAHAXStaker	GaugeLP	contracts/interfaces/IGaugeVoterV2.sol	see diffs. 5-7 below
7	MAHAXStaker	GaugeUniswapV3	contracts/interfaces/IGaugeVoterV2.sol	see diffs. 5-7 below
8	GaugeUniswapV3	BaseV2Voter	contracts/interfaces/INFTStaker.sol	see diffs. 8-11 below
9	GaugeUniswapV3	GaugeLP	contracts/interfaces/INFTStaker.sol	see diffs. 8-11 below
10	GaugeUniswapV3	MAHAXLocker	contracts/interfaces/INFTStaker.sol	see diffs. 8-11 below
11	GaugeUniswapV3	MAHAXStaker	contracts/interfaces/INFTStaker.sol	see diffs. 8-11 below

Diffs. 1 -- 4: `epoch()`, `userPointEpoch()`, `userPointHistory()` and `pointHistory()` are added to *INFTLocker.sol* in **BaseV2Bribes** and **GaugeLP** contracts, as opposed to **MAHAXLocker** and **MAHAXStaker**. However, *INFTLocker.sol* is an unused import in **BaseV2Bribes** and **GaugeLP** contracts, therefore these differences do not affect the protocol logic.

Recommendation: remove unused *INFTLocker.sol* import from **BaseV2Bribes** and **GaugeLP** contracts.

Diffs. 5 -- 7: Two overloads of `distribute()` method are added to *IGaugeVoterV2.sol* in **BaseV2Voter**, **GaugeLP** and **GaugeUniswapV3**, as opposed to **MAHAXStaker**. However, the `distribute` method is never used in **MAHAXStaker** contract, therefore these differences do not affect the protocol logic.

Diffs. 8 -- 11: `banFromStake()` method is added to *INFTStaker.sol* in **GaugeUniswapV3** contract, as opposed to **BaseV2Voter**, **GaugeLP**, and **MAHAXLocker**, **MAHAXStaker**. However, the `banFromStake` method is never used in **GaugeUniswapV3**, therefore these differences do not affect the protocol logic.

Summary

The team found inconsistencies in interfaces across contracts in the SoW. These inconsistencies indicate that the smart contracts were deployed at different times and from different source code revisions. However, these differences are classified as compatible changes.

Severity: Low

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Searching for the original commit in the client's repository

At this stage, we are looking for the original commit in the client's repository. In the best case, all contracts should be deployed from a single codebase revision to decrease the probability of inconsistency in the contract logic.

See exact way of figuring out this information in section A2.

governance-contracts

contracts	commit	# contracts
BaseV2Bribes **BaseV2Voter** *+ proxy* **EmissionController** **FeesSplitter** **GaugeLP** *+ proxy* **GaugeUniswapV3** *proxy* **MAHATimelockController** *14 and 30* **MAHAXGovernor** **Registry** **RenderingContract**	latest (2023-01-28T13:06:10+05:30): c820c850cc0125488c6d8b6d65f5d756b0f4b9d7 earliest (2023-01-13T11:55:16+05:30): e6a6297bbe7e24adff58c4044d96c1625a7f47bc	13
MAHAXLocker **MAHAXStaker**	latest (2022-08-29T06:19:20+01:00): da28d85921d3cdbbcf187c69d9d847d1199f872b earliest (2022-08-19T20:47:04+01:00): ff91b2497237a617e1af530df63ff308e6be4c7e	2
GaugeUniswapV3	latest (2023-03-25T22:09:22+03:00): dc4578434c2dcdda0217e44276eec9afa7098811 earliest (2023-03-25T21:58:12+03:00): c4b30e5ace7b9f29cab4b28601f501a7f3135e1f	1

contracts	commit	# contracts
MAHAXVetoGovernor	latest (2023-01-08T17:15:55+05:30): a6f2e4d266d2c4ee33535e255b28715736de8a2a earliest (2022-09-03T12:19:57+01:00): d90d974b1a19dd98f23dd8733975501689844adc	1

Conclusion:

There is no original commit for all contracts in the SoW related to the governance-contracts repository. We found three different groups of contracts (see table governance-contracts) and matched them to three different code revisions. The timestamps of these revisions differ by more than four months. Even after removing the files discussed in the previous section (INFTLocker.sol, INFTStaker.sol and IGaugeVoterV2.sol), three groups of contracts (although slightly different), there is no original commit for all contracts still.

token

contracts	commit	# contracts
MahaToken **ARTHValuecoin**	latest (2023-01-28T19:48:48+05:30): c75610da6c48b3a79e0703a11852bb0ac2a58a0d earliest (2023-01-07T11:19:53+05:30): 643761ba97e36a70c4c7e08ca26ff27853954b9f	2

Conclusion:

Both contracts related to the token repository are matched to a range of revisions, as shown in table token.

Summary

There is no original commit or timestamp to which all contracts in the SoW could be matched. Even after considering the differences between the contract files discussed in the previous section, there is no point in time when the code deployed to the network can be matched to. This could result in significant inconsistencies in the protocol logic. To mitigate this risk, it is recommended to conduct a security audit of this deployed version of the code.

Severity: High

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Analyzing the dependencies of the contracts

The goal is to check the consistency of every dependency version and identify any changes across every dependency codebase.

contract	@openzeppelin	@uniswap/ v3-core	@uniswap/ v3-periphery
BaseV2Bribes	4.7.3		
BaseV2Voter_Implementation	4.7.3		
BaseV2Voter_Proxy	4.7.3		
EmissionController	4.7.3		
FeesSplitter	4.7.3		
GaugeLP_Implementation	4.7.3		
GaugeLP_Proxy	4.7.3		
GaugeUniswapV3_Implementation	4.7.3	1.0.0	1.0.0 - 1.3.0
GaugeUniswapV3_Proxy	4.7.3		
MAHATimelockController-14	4.7.3		
MAHATimelockController-30	4.7.3		
MAHAXGovernor	4.7.3		
MAHAXLocker	4.6.0		
MAHAXStaker	4.6.0		
MAHAXVetoGovernor	4.6.0		
Registry	4.6.0		
MahaToken	4.3.3 with changes (see below)		

Changes to external dependencies

#	contract	path	comment
1	MahaToken	@openzeppelin/contracts/access/AccessControlEnumerable.sol	cosmetics
2	MahaToken	@openzeppelin/contracts/token/ERC20/ERC20.sol	`_name` and `_symbol` changed from `private` to `internal`

Summary

The contracts in the SoW use two dependencies: UniswapV3 and OpenZeppelin. The version of the UniswapV3 dependency can be matched to 1.0.0. Three different versions of the OpenZeppelin smart contracts are used in the SoW's contracts: 4.3.3, 4.6.0, and 4.7.3. We also found changes to the OpenZeppelin dependency code in the MahaToken smart contract (see Changes to External Dependency section) that are not tracked in the project's repositories. However, we consider them to be safe. The security issues of using three different versions of OpenZeppelin should be investigated during the security audit of the deployed smart contracts code.

Severity: Medium

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Deployment check: storage

We thoroughly examine both its public and private storage to ensure that there are no misconfigurations, especially:

1. Incorrect or outdated addresses to other smart contracts referenced in the scope of work (SoW) - this includes addresses stored in variables, mappings, and other data structures.
2. Any references to other smart contracts or externally owned accounts (EOAs) that may be incorrect or outdated.
3. Any incorrect protocol settings stored in variables or other data structures.
4. Misconfigurations related to the roles and permissions of the contract.
5. Governance issues that may impact the operation and business logic of the smart contract.

BaseV2Voter

issue #	issue type	initial check status	first re-check status	second re-check status
1	out of scope contract	dismissed	--	--
2	out of scope contract	dismissed	--	--
3	out of scope contract	dismissed	--	--

1. pools[0] = 0xE7cDba5e9b0D5E044AaB795cd3D659aAc8dB869B: out of scope ARTH/WETH UniswapV3 pool contract
2. pools[1] = 0x8a039FB7503B914A9cb2a004010706ca192377Bc: out of scope ARTH/MAHA UniswapV3 pool contract
3. pools[2] = 0xdf34bad1D3B16c8F28c9Cf95f15001949243A038: out of scope ARTH/USDC Curve.fi pool contract

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BaseV2Bribes

issue #	issue type	initial check status	first re-check status	second re-check status
1	out of scope contract	dismissed	--	--

1. rewards[0] = 0x3F6D1649A1366b0E82173D33e365953f9F1Cc84C: out of scope Scallop Token contract

EmissionController

issue #	issue type	initial check status	first re-check status	second re-check status
1	EOA	acknowledged	fixed	--

1. _owner = 0x547283f06B4479FA8bF641cAA2ddc7276d4899bF: EOA
    - first re-check: fixed to MAHATimelockController-14 (0x43c958AFFe41D44F0a02aE177b591E93c86AdbEa)

GaugeUniswapV3

NOTE: At the time of initial check (24.01.2023) the provided contract address was 0x0b1b37c0d376e72d523319c6592f3a24d39912fd. Since then the MAHA team changed it to 0xa7af7eaa2bf2fbea3fdb90db1a820508ed3f037c and notified the Mundus Security team.

issue #	issue type	initial check status	first re-check status	second re-check status
1	EOA	acknowledged	fixed	--

1. _owner = 0x77cd66d59ac48a0e7ce54ff16d9235a5ffff335e: EOA
    - first re-check: fixed to 0x0

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MAHATimelockController-14

NOTE: critical findings are marked with ⚠.

issue #	issue type	initial check status	first re-check status	second re-check status
1 ⚠	outdated contract	acknowledged	fixed	--
2 ⚠	outdated contract	acknowledged	fixed	--
3	role misconfiguration	dismissed	--	--
4	role misconfiguration	dismissed	--	--

1. `hasRole(CANCELLER_ROLE, 0x0fBd92eA11e23D959E1489A9Abb84ae2E4778D31) -> true`: outdated MAHAXGovernor contract
   - first re-check: outdated MAHAXGovernor does not posses this role
2. `hasRole(PROPOSER_ROLE, 0x0fBd92eA11e23D959E1489A9Abb84ae2E4778D31) -> true`: outdated MAHAXGovernor contract
   - first re-check: fixed to current MAHAXGovernor (`0xe7d23c2b3e9148c46cec796f018842ab72d5867f`)
3. `hasRole(TIMELOCK_ADMIN_ROLE, 0x43c958AFFe41D44F0a02aE177b591E93c86AdbEa) -> true`: MAHATimelockController-14 is an admin of itself
4. `hasRole(TIMELOCK_ADMIN_ROLE, 0x6357EDbfE5aDA570005ceB8FAd3139eF5A8863CC) -> true`: GnosisMultisig-1 should not be timelock admin

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MAHATimelockController-30

issue #	issue type	initial check status	first re-check status	second re-check status
1	role misconfiguration	acknowledged	fixed	--
2	role misconfiguration	dismissed	--	--
3	role misconfiguration	dismissed	--	--

1. PROPOSER_ROLE has no members
    - first re-check: MAHATimelockController-14 (0x43c958AFFe41D44F0a02aE177b591E93c86AdbEa) and (GnosisSafe-1 (0x6357EDbfE5aDA570005ceB8FAd3139eF5A8863CC)) posses this role
2. hasRole(TIMELOCK_ADMIN_ROLE, 0xb45021f5313b93927699aae6cbe989bccf6b5900) -> true: MAHATimelockController-30 is an admin of itself
3. hasRole(TIMELOCK_ADMIN_ROLE, 0x6357EDbfE5aDA570005ceB8FAd3139eF5A8863CC) -> true: GnosisMultisig-1 should not be timelock admin

MAHAXGovernor

NOTE: At the time of initial check (24.01.2023) the provided contract address was 0xFfEC018583152aB5f056c5323f1f68b701bF1Bc5. Since then the MAHA team changed it to 0xe7d23c2b3e9148c46cec796f018842ab72d5867f and notified the Mundus Security team.

Critical findings are marked with ⚠.

issue #	issue type	initial check status	first re-check status	second re-check status
1 ⚠	outdated contract	acknowledged	fixed	--

1. _timelock = 0xd9333e02a4d85611d0f0498b858b2ae3c29de6fb: outdated TimelockController contract
    - first re-check: fixed to MAHATimelockController-14 (0x43c958affe41d44f0a02ae177b591e93c86adbea)

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MahaToken

issue #	issue type	initial check status	first re-check status	second re-check status
1	role misconfiguration	acknowledged	fixed	--
2	role misconfiguration	acknowledged	fixed	--

1. `hasRole(DEFAULT_ADMIN_ROLE, 0x6357EDbfE5aDA570005ceB8FAd3139eF5A8863CC) -> true`: GnosisSafe-1, should be MAHATimelockController-30
   - first re-check: fixed to MAHATimelockController-30 (0xB45021F5313B93927699aAe6CBe989bccf6B5900)
2. `hasRole(MINTER_ROLE, 0x6357EDbfE5aDA570005ceB8FAd3139eF5A8863CC) -> true`: GnosisSafe-1
   - first re-check: no address possesses `MINTER_ROLE`

MAHAXLocker

issue #	issue type	initial check status	first re-check status	second re-check status
1	out of scope contract	acknowledged	fixed	--
2	EOA	acknowledged	fixed	--

1. `hasRole(MIGRATION_ROLE, 0xb180b2e4821e99a69d19f0845d2cc572ea412481) -> true`: out of scope LockMigrator contract
   - first re-check: fixed to `false`
2. `_defaultRoyaltyInfo.receiver = 0x6bfc9DB28f0A6d11a8d9d64c86026DDD2fad293B`: EOA
   - first re-check: changed to FeesSplitter (0x9032F1Bd0cc645Fde1b41941990dA85f265A7623)

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MAHAXStaker

NOTE: critical findings are marked with ⚠.

issue #	issue type	initial check status	first re-check status	second re-check status
1 ⚠	outdated contract	acknowledged	fixed	--
2	role misconfiguration	acknowledged	remains	fixed

1. `hasRole(DEFAULT_ADMIN_ROLE, 0xd9333e02a4d85611d0f0498b858b2ae3c29de6fb) -> true`: outdated TimelockController contract
    - first re-check: fixed to `MAHATimelockController-14` (`0x43c958affe41d44f0a02ae177b591e93c86adbea`)
2. `KICK_FROM_STAKE_ROLE` has no members
    - second re-check: `0x77cd66d59ac48a0e7ce54ff16d9235a5ffff335e` and `0x3884b7b3b686bbf42049535f94c093329adc4863` accounts possess the `KICK_FROM_STAKE_ROLE`.

Disclaimers

Mundus disclaimer

The smart contracts given for audit have been analyzed in accordance with the best industry practices at the date of this report, in relation to cybersecurity vulnerabilities and issues in smart contract source code, the details of which are disclosed in this report (Source Code); the Source Code compilation, deployment, and functionality (performing the intended functions).

The audit makes no statements or warranties on the security of the code. It also cannot be considered as a sufficient assessment regarding the utility and safety of the code, bug-free status, or any other statements of the contract. While we have done our best in conducting the analysis and producing this report, it is important to note that you should not rely on this report only — we recommend proceeding with several independent audits and a public bug bounty program to ensure the security of smart contracts.

Technical disclaimers

Smart contracts are deployed and executed on a blockchain platform. The platform, its programming language, and other software related to the smart contract can have vulnerabilities that can lead to hacks. Thus, the audit can't guarantee the explicit security of the audited smart contracts.

Appendix

A1. Statistics among contracts

contract	# project files	# @openzeppelin files	# @uniswap files
BaseV2Bribes	5	10	0
BaseV2Voter_Implementation	11	16	0
BaseV2Voter_Proxy	1	7	0
EmissionController	6	7	0
FeesSplitter	1	6	0
GaugeLP_Implementation	9	14	0
GaugeLP_Proxy	1	7	0
GaugeUniswapV3_Implementation	11	16	12
GaugeUniswapV3_Proxy	1	7	0
GnosisSafe-1_Implementation	1	0	0
GnosisSafe-1_Proxy	1	0	0
GnosisSafe-2_Implementation	15	0	0
GnosisSafe-2_Proxy	1	0	0
MAHATimelockController-14	1	12	0
MAHATimelockController-30	1	12	0
MahaToken	1	21	0
MAHAXGovernor	2	25	0
MAHAXLocker	5	21	0
MAHAXStaker	5	20	0
MAHAXVetoGovernor	2	18	0
Registry	2	6	0
RenderingContract	2	0	0

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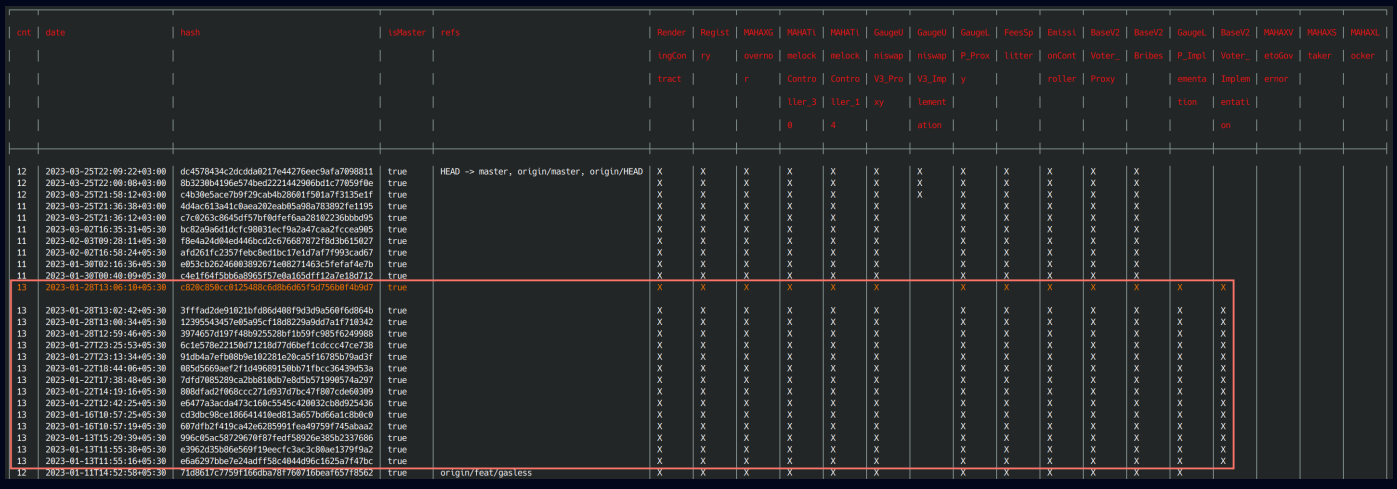
A2. Original commit in the client's repository

This section contains output screenshots of the internal tool. We use it to determine suitable set of revisions in contracts' repos.

governance-contracts



cnt	date	hash	isMaster	refs	Render ingCon tract	Regist ry	MAHAXG overno r	MAHATl melock Contro ller_3	MAHATl melock Contro ller_1	GaugeU niswap V3_Pro xy	GaugeU niswap V3_Imp lement ation	GaugeL P_Prox y	FeesSp litter	Emissi onCont roller	BaseV2 Voter_ Proxy	BaseV2 Bribes	GaugeL P_Impl ementa tion	BaseV2 Voter_ Implem entati on	MAHAXV etoGov ernor	MAHAXS taker	MAHAXL ocker
12	2023-03-25T22:09:22+03:00	dc4578434c2dcdda0217e44276eec9afa7098811	true	HEAD -> master, origin/master, origin/HEAD	X	X	X	X	X	X	X	X	X	X	X	X					
12	2023-03-25T22:00:08+03:00	8b3230b4196e574bed2221442906bd1c77059f0e	true		X	X	X	X	X	X	X	X	X	X	X	X					
12	2023-03-25T21:58:12+03:00	c4b30e5ace7b9f29cab4b28601f501a7f3135e1f	true		X	X	X	X	X	X	X	X	X	X	X	X					
11	2023-03-25T21:36:38+03:00	4d4ac613a41c0aea202eab05a98a783892fe1195	true		X	X	X	X	X	X		X	X	X	X	X					
11	2023-03-25T21:36:12+03:00	c7c0263c8645df57bf0dfef6aa28102236bbbd95	true		X	X	X	X	X	X		X	X	X	X	X					
11	2023-03-02T16:35:31+05:30	bc82a9a6d1dcfc98031ecf9a2a47caa2fcce a905	true		X	X	X	X	X	X		X	X	X	X	X					
11	2023-02-03T09:28:11+05:30	f8e4a24d04ed446bcd2c676687872f8d3b615027	true		X	X	X	X	X	X		X	X	X	X	X					
11	2023-02-02T16:58:24+05:30	afd261fc2357febc8ed1bc17e1d7af7f993cad67	true		X	X	X	X	X	X		X	X	X	X	X					
11	2023-01-30T02:16:36+05:30	e053cb262460038926 71e08271463c5fefaf4e7b	true		X	X	X	X	X	X		X	X	X	X	X					
11	2023-01-30T00:40:09+05:30	c4e1f64f5bb6a8965f57e0a165dff12a7e18d712	true		X	X	X	X	X	X		X	X	X	X	X					
13	2023-01-28T13:06:10+05:30	c820c850cc0125488c6d8b6d65f5d756b0f4b9d7	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-28T13:02:42+05:30	3fffad2de91021bfd86d408f9d3d9a560f6d864b	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-28T13:00:34+05:30	12395543457e05a95cf18d8229a9dd7a1f710342	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-28T12:59:46+05:30	3974657d197f48b925528bf1b59fc985f6249988	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-27T23:25:53+05:30	6c1e578e22150d71218d77d6bef1cdccc47ce738	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-27T23:13:34+05:30	91db4a7efb08b9e102281e20ca5f16785b79ad3f	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-22T10:44:06+05:30	085d5669aef2f1d496b9150bb71fbcc36439d53a	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-22T17:38:48+05:30	7dfd7085289ca2bb810db7e8d5b571990574a207	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-22T14:19:16+05:30	808dfad2f068ccc271d937d7bc47f807cde60309	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-22T12:42:25+05:30	e6477a3acda473c160c5545c420032cb8d925436	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-16T10:57:25+05:30	cd3dbc98ce18664141ed813a657bd66a1c8b0c0	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-16T10:57:19+05:30	607dfb2f419ca42e6285991fea49759f745abaa2	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-13T15:29:39+05:30	996c05ac58729670f87fedf58926e385b2337686	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-13T11:55:38+05:30	e3962d35b86e569f19ecfc3ac3c80ae1379f9a2	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
13	2023-01-13T11:55:16+05:30	e6a6297bbe7e24adff58c4044d96c1625a7f47bc	true		X	X	X	X	X	X		X	X	X	X	X	X	X			
12	2023-01-11T14:52:58+05:30	71d8617c7759f166dba78f760716beaf657f8562	true	origin/feat/gasless	X	X	X	X	X	X		X	X	X	X	X	X	X			

cnt	date	hash	isMaster	refs	MAHAXV etoGov ernor	MAHAXS taker	MAHAXL ocker
1	2022-10-01T19:36:16+01:00	bf568eaef06570c94f0f7da5eb6ec6ec4a16cd8f	true		X		
1	2022-10-01T19:27:31+01:00	95fdc3b5ac55a5aa05b185c9611e9b144295130d	true		X		
1	2022-10-01T19:27:20+01:00	a3ac60ae1ca55f4b6fabe4d9402f456fa9ffdaab	true		X		
1	2022-09-22T05:39:23-07:00	be3ee9abe504e7819a110fc7c0bcbfc770c3c51f	true		X		
1	2022-09-19T12:05:01-07:00	5dfd68cf7d03cad3c2f3ccec46bf4acec4c2829b	true		X		
1	2022-09-18T07:31:17-07:00	b4463091724beaf6a06dd0ee8ec1f72abcc5875a	true		X		
1	2022-09-13T18:50:07+01:00	ce786342a07aadd4cdf754d3efe1a7cfb6fd8970	true		X		
1	2022-09-13T18:48:53+01:00	c8fe9e33a185e047e41da0b258922105df29afe0	true		X		
1	2022-09-03T12:20:22+01:00	b575f77350d50eff026fa197e573088d5a7ac325	true		X		
1	2022-09-03T12:19:57+01:00	d90d974b1a19dd98f23dd8733975501689844adc	true		X		
2	2022-08-29T06:19:20+01:00	da28d85921d3cdbbcf187c69d9d847d1199f872b	true			X	X
2	2022-08-26T09:43:11+01:00	6ce212a75d83dca3d4fd831dd8e13297a98ed6e0	true			X	X
2	2022-08-24T15:06:15+01:00	d9ce8664343700ad230d7c885eafcbbc527a24be	true			X	X

cnt	date	hash	isMaster	refs	GaugeU niswap V3_Imp lement ation
1	2023-03-25T22:09:22+03:00	dc4578434c2dcdda0217e44276eec9afa7098811	true	HEAD -> master, origin/master, origin/HEAD	X
1	2023-03-25T22:00:08+03:00	8b3230b4196e574bed2221442906bd1c77059f0e	true		X
1	2023-03-25T21:58:12+03:00	c4b30e5ace7b9f29cab4b28601f501a7f3135e1f	true		X

cnt	date	hash	isMaster	refs	MAHAXV etoGov ernor
1	2023-01-08T17:15:55+05:30	a6f2e4d266d2c4ee33535e255b28715736de8a2a	true		X
1	2023-01-08T17:05:11+05:30	61a70c192be4544299f92eebb1639d002f823fe6	true		X
1	2023-01-07T12:36:55+05:30	d132a7e751e22291e20d39bcbd95ddaa080b3ef7	true		X
1	2023-01-03T07:57:14+05:30	6fede654db53aac5efdf0a412eae4da34764b731	true		X
1	2022-12-24T11:45:13+05:30	f03382a489e73d8ace9ba7fb7fae43e7d0c773cc	true	tag: v2.0.2	X
1	2022-12-24T11:45:07+05:30	fba9eee6441581b035c440a0c788066d5127b1be	true		X
1	2022-12-24T11:34:47+05:30	fce62a1ca93420be033b025abaf93d4327f3324d	true	tag: v2.0.1	X
1	2022-12-24T11:34:25+05:30	d791e1b5fb5f10d0a59d7d0a0e8a1711cbd893ed	true		X
1	2022-12-24T11:04:35+05:30	b2ee028337752a94780987a2dce28d4a30c8906f	true		X

MUNDUS
SECURITY

token

cnt	date	hash	isMaster	refs	MahaToken	ARTHValuecoin
1	2023-01-28T20:20:00+05:30	0d98f85352f88a5d87663e1df06b509f053d2400	true	HEAD -> master, origin/master, origin/HEAD		X
1	2023-01-28T19:52:54+05:30	166ff7cb5ed5cc3868c6eca6c05158ecc8126727	true			X
2	2023-01-28T19:48:48+05:30	c75610da6c48b3a79e0703a11852bb0ac2a58a0d	true		X	X
2	2023-01-28T19:48:35+05:30	9038ac6c6dac98a0d6d3b332041dd4449780ec1c	true		X	X
2	2023-01-07T11:21:03+05:30	c334f08095c93e4456a6bc9dec1d62dbe84d880b	true	tag: v2.0.0	X	X
2	2023-01-07T11:20:51+05:30	fc0110c23e91216e5b2ce6489fe3ac7a65c6853f	true		X	X
2	2023-01-07T11:19:53+05:30	643761ba97e36a70c4c7e08ca26ff27853954b9f	true		X	X
1	2022-05-21T11:53:15+01:00	ddb957d42714bc6a047870049cd1ba8f46b1fc79	true			X