

Initialize cWETHv3 on Arbitrum

Updated as of block [20098274](#) at 6/15/2024, 12:05:47 PM ET

- ID: 259
- Proposer: [0x3FB19771947072629C8EEF7995a2eF23B72d4C8A](#)
- Start Block: 20111128 (6/17/2024, 10:30:49 AM ET)
- End Block: 20130838 (6/20/2024, 9:41:19 AM ET)
- Targets: [0x4dbd4fc535Ac27260664B68fCf827bA60ABAB3f](#) ; [0xC02aaA39b223FE8D0A0e5C4F27eAD9083C756C2](#) ; [0xC02aaA39b223FE8D0A0e5C4F27eAD9083C756C2](#) ; [0x72Ce9c846789dfB6fc1f34caAD255d9ef7831ef](#) ; [0x4976fb3c32e5B8cf2b6cCB3c109BA78EBA841](#)

Forum Post

Forum post for Proposal # 259 is present here: [Forum Post](#)

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Proposal Text

Initialize cWETHv3 on Arbitrum

Proposal summary

Compound Growth Program [AlphaGrowth] proposes deployment of Compound III to the Arbitrum network. This proposal takes the governance steps recommended and necessary to initialize a Compound III WETH market on Arbitrum; upon execution, cWETHv3 will be ready for use. Simulations have confirmed the market's readiness, as much as possible, using the [Comet scenario suite](#). The new parameters include setting the risk parameters based off of the [recommendations from Gauntlet](#).

Further detailed information can be found on the corresponding [proposal](#), [pull request](#), [deploy market GitHub action run](#) and [forum discussion](#).

The market migration to create a new WETH Comet market on Arbitrum also includes a new collateral asset weETH which has not been used in any other Compound market previously. In prior analysis of weETH as a collateral asset, Gauntlet identified oracle risks which [could expose the protocol to exaggerated market movements](#) and a yield risk which could [cause yield shocks and consequentially elevate slippage magnitude and liquidity on DEXs](#).

Proposal Actions

The first proposal action sets the Comet configuration and deploys a new Comet implementation on Arbitrum. This sends the encoded `setFactoryConfiguration`, `deployAndUpgradeTo` calls across the bridge to the governance receiver on Arbitrum. It also calls `setRewardConfig` on the Arbitrum rewards contract, to establish Arbitrum's bridged version of COMP as the reward token for the deployment and set the initial supply speed to be 6 COMP/day and borrow speed to be 4 COMP/day.

The second action wraps ETH as WETH so it can be then transferred.

The third action approves (ArbitrumL1GatewayRouter) [TokenMessenger](#) to take the Timelock's WETH on Mainnet, in order to seed the market reserves through the arbitrumL1GatewayRouter.

The fourth action bridges WETH from mainnet via 'outboundTransfer' function on ArbitrumL1GatewayRouter's contract to mint native WETH to Comet on Arbitrum.

The fifth action updates the ENS TXT record `v3-official-markets` on `v3-additional-grants.compound-community-licenses.eth`, updating the official markets JSON to include the new Arbitrum cWETHv3 market.

Checks

Reports all state changes from the proposal  **Passed**

Info:

- [illegible]

- TransparentUpgradeableProxy at 0x8315177aB297bA92A06054cE80a67Ed4DBd7ed3a

Info:

- Info:**

- [illegible]

- PublicResolver at 0x4976fb03c32e5b8cfe2b6ccb31c09ba78EbaBa41
 - Undecoded log: {"name":"","anonymous":false,"inputs":null,"raw":{"address":"0x4976fb03c32e5b8cfe2b6ccb31c09ba78EbaBa41","topics":["0xd8c9334b1a9c2f9da342a0a2b32629c1a229b6445dad78947f674b44444a7550","0x7dcf87198fd673716e5a32b206d9379c4fcbad8875073f52b2fd"]}}

Check all targets are verified on Etherscan Passed

Info:

- [0x4Dbd4fc535Ac27206064B68FfCf827b0A60BAB3f](#) : Contract (verified)
- [0xC02aaA39b223FE8D0A0e5C4F27eAD9083C756Cc2](#) : Contract (verified)
- [0x72Ce9c846789fdB6fC1f34aC4AD25D9ef7031ef](#) : Contract (verified)
- [0x4976fb03c32e5B8cfe2b6cCB31c09Ba78EbaBa41](#) : Contract (verified)

Check all touched contracts are verified on Etherscan Passed

Info:

- [0xD73a92Be73FfbFcF3854433A5FcbAbF9c1316073](#) : EOA (verification not applicable)
- [0xc0Da02939E1441F497fd74F78cE7Decb17B66529](#) : Contract (verified)
- [0xeF3B6E9e13706A8F01fe98fdCf66335dc5CfdEED](#) : Contract (verified)
- [0x6d903f6003cca6255D85CcA4D3B5E5146dC33925](#) : Contract (verified)
- [0x4Dbd4fc535Ac27206064B68FfCf827b0A60BAB3f](#) : Contract (verified)
- [0x5aED5f8A1e3607476F1f81c3d8fe126deB0aFE94](#) : Contract (verified)
- [0x8315177aB297bA92A06054cE80a67Ed4DBd7ed3a](#) : Contract (verified)
- [0x1066CEcc8880948FE55e427E94F1FF221d626591](#) : Contract (verified)
- [0xC02aaA39b223FE8D0A0e5C4F27eAD9083C756Cc2](#) : Contract (verified)
- [0x72Ce9c846789fdB6fC1f34aC4AD25D9ef7031ef](#) : Contract (verified)
- [0x52595021fA01B3E14EC6C88953AFc8E35dFf423c](#) : Contract (verified)
- [0xd92023E9d9911199a6711321D1277285e6d4e2db](#) : Contract (verified)
- [0x4B8e9b3F253E68837bf719997B1eeB9E8f1960e2](#) : Contract (not verified)
- [0x4976fb03c32e5B8cfe2b6cCB31c09Ba78EbaBa41](#) : Contract (verified)
- [0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e](#) : Contract (verified)

Check all targets do not contain selfdestruct Passed with warnings

Warnings:

- [0x4Dbd4fc535Ac27206064B68FfCf827b0A60BAB3f](#) : Contract (with DELEGATECALL)
- [0x72Ce9c846789fdB6fC1f34aC4AD25D9ef7031ef](#) : Contract (with DELEGATECALL)
- [0x4976fb03c32e5B8cfe2b6cCB31c09Ba78EbaBa41](#) : Contract (with DELEGATECALL)

Info:

- [0xC02aaA39b223FE8D0A0e5C4F27eAD9083C756Cc2](#) : Contract (looks safe)

Check all touched contracts do not contain selfdestruct Passed with warnings

Warnings:

- [0xD73a92Be73FfbFcF3854433A5FcbAbF9c1316073](#) : EOA (may have code later)
- [0x4Dbd4fc535Ac27206064B68FfCf827b0A60BAB3f](#) : Contract (with DELEGATECALL)
- [0x8315177aB297bA92A06054cE80a67Ed4DBd7ed3a](#) : Contract (with DELEGATECALL)
- [0x72Ce9c846789fdB6fC1f34aC4AD25D9ef7031ef](#) : Contract (with DELEGATECALL)
- [0xd92023E9d9911199a6711321D1277285e6d4e2db](#) : Contract (with DELEGATECALL)
- [0x4976fb03c32e5B8cfe2b6cCB31c09Ba78EbaBa41](#) : Contract (with DELEGATECALL)

Info:

- [0xc0Da02939E1441F497fd74F78cE7Decb17B66529](#) : Trusted contract (not checked)
- [0xeF3B6E9e13706A8F01fe98fdCf66335dc5CfdEED](#) : Contract (looks safe)
- [0x6d903f6003cca6255D85CcA4D3B5E5146dC33925](#) : Trusted contract (not checked)
- [0x5aED5f8A1e3607476F1f81c3d8fe126deB0aFE94](#) : Contract (looks safe)
- [0x1066CEcc8880948FE55e427E94F1FF221d626591](#) : Contract (looks safe)
- [0xC02aaA39b223FE8D0A0e5C4F27eAD9083C756Cc2](#) : Contract (looks safe)
- [0x52595021fA01B3E14EC6C88953AFc8E35dFf423c](#) : Contract (looks safe)
- [0x4B8e9b3F253E68837bf719997B1eeB9E8f1960e2](#) : Contract (looks safe)
- [0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e](#) : Contract (looks safe)

Reports on whether the caller needs to send ETH with the call Passed

Info:

No ETH is required to be sent by the account that executes this proposal.

Runs solc against the verified contracts Passed

Info:

Compiler warnings for ENSRegistryWithFallback at 0x000000000000C2E074eC69A0dFb2997BA6C7d2e1e

```
INFO:CryticCompile: 'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt' running
WARNING:CryticCompile:Warning: crytic-export/etherscan-contracts/0x000000000000C2E074eC69A0dFb2997BA6C7d2e1e-
```

```

ENSRegistryWithFallback.sol:33:31: Warning: This declaration shadows an existing declaration.
    function isApprovedForAll(address owner, address operator) external view returns (bool);
    ^-----^

crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:29:5: The shadowed
declaration is here:
    function owner(bytes32 node) external view returns (address);
    ^-----^

Warning: crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:195:31: Warning:
This declaration shadows an existing declaration.
    function isApprovedForAll(address owner, address operator) external view returns (bool) {
    ^-----^

crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:153:5: The shadowed
declaration is here:
    function owner(bytes32 node) public view returns (address) {
    ^ (Relevant source part starts here and spans across multiple lines).

Warning: crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:199:38: Warning:
This declaration shadows an existing declaration.
    function _setOwner(bytes32 node, address owner) internal {
    ^-----^

crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:153:5: The shadowed
declaration is here:
    function owner(bytes32 node) public view returns (address) {
    ^ (Relevant source part starts here and spans across multiple lines).

Warning: crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:203:47: Warning:
This declaration shadows an existing declaration.
    function _setResolverAndTTL(bytes32 node, address resolver, uint64 ttl) internal {
    ^-----^

crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:167:5: The shadowed
declaration is here:
    function resolver(bytes32 node) public view returns (address) {
    ^ (Relevant source part starts here and spans across multiple lines).

Warning: crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:203:65: Warning:
This declaration shadows an existing declaration.
    function _setResolverAndTTL(bytes32 node, address resolver, uint64 ttl) internal {
    ^-----^

crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:176:5: The shadowed
declaration is here:
    function ttl(bytes32 node) public view returns (uint64) {
    ^ (Relevant source part starts here and spans across multiple lines).

Warning: crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:275:38: Warning:
This declaration shadows an existing declaration.
    function _setOwner(bytes32 node, address owner) internal {
    ^-----^

crytic-export/etherscan-contracts/0x0000000000C2E074eC69A0dFb2997BA6C7d2e1e-ENSRegistryWithFallback.sol:254:5: The shadowed
declaration is here:
    function owner(bytes32 node) public view returns (address) {
    ^ (Relevant source part starts here and spans across multiple lines).

```

Compiler warnings for Bridge at 0x1066CEcC8880948FE55e427E94F1FF221d626591

```

INFO:CryticCompile:'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt/crytic-
export/etherscan-contracts/0x1066CEcC8880948FE55e427E94F1FF221d626591-Bridge' running

```

Compiler warnings for PublicResolver at 0x4976fb03C32e5B8cfe2b6cCB31c09Ba78EBaBa41

```

INFO:CryticCompile:'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt' running
WARNING:CryticCompile:Warning: crytic-export/etherscan-contracts/0x4976fb03C32e5B8cfe2b6cCB31c09Ba78EBaBa41-
PublicResolver.sol:1375:1: Warning: Experimental features are turned on. Do not use experimental features on live deployments.
pragma experimental ABIEncoderV2;
^-----^

```

Compiler warnings for TransparentUpgradeableProxy at 0x4Dbd4fc535Ac27206064B68FFCf827b0A60BAB3f

```

INFO:CryticCompile:'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt/crytic-
export/etherscan-contracts/0x4Dbd4fc535Ac27206064B68FFCf827b0A60BAB3f-TransparentUpgradeableProxy' running

```

Compiler warnings for L1GatewayRouter at 0x52595021fA01B3E14EC6C88953AFc8E35dFf423c

```

INFO:CryticCompile:'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt/crytic-
export/etherscan-contracts/0x52595021fA01B3E14EC6C88953AFc8E35dFf423c-L1GatewayRouter' running
WARNING:CryticCompile:Warning: arbos-precompiles/arbos/builtin/ArbSys.sol: Warning: SPDX license identifier not provided in source
file. Before publishing, consider adding a comment containing "SPDX-License-Identifier: <SPDX-License>" to each source file. Use
"SPDX-License-Identifier: UNLICENSED" for non-open-source code. Please see https://spdx.org for more information.

```

```
Warning: contracts/tokenbridge/libraries/gateway/GatewayRouter.sol:49:5: Warning: Function state mutability can be restricted to view
function postUpgradeInit() external {
  ^ (Relevant source part starts here and spans across multiple lines).
```

Compiler warnings for Inbox at 0x5aED5f8A1e3607476F1f81c3d8fe126deB0aFE94

```
INFO:CryticCompile: 'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt/crytic-export/etherscan-contracts/0x5aED5f8A1e3607476F1f81c3d8fe126deB0aFE94-Inbox' running
```

Compiler warnings for TransparentUpgradeableProxy at 0x72Ce9c846789fdB6fC1f34aC4AD25Dd9ef7031ef

```
INFO:CryticCompile: 'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt/crytic-export/etherscan-contracts/0x72Ce9c846789fdB6fC1f34aC4AD25Dd9ef7031ef-TransparentUpgradeableProxy' running
```

Compiler warnings for TransparentUpgradeableProxy at 0x8315177aB297bA92A06054cE80a67Ed4DBd7ed3a

```
INFO:CryticCompile: 'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt/crytic-export/etherscan-contracts/0x8315177aB297bA92A06054cE80a67Ed4DBd7ed3a-TransparentUpgradeableProxy' running
```

Compiler warnings for WETH9 (WETH) at 0xc02aaA39b223FE8D0A0e5C4F27eAD9083C756Cc2

```
INFO:CryticCompile: 'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt' running
```

Compiler warnings for TransparentUpgradeableProxy at 0xd92023E9d9911199a6711321D1277285e6d4e2db

```
INFO:CryticCompile: 'solc --standard-json --allow-paths /home/runner/work/compound-seatbelt/compound-seatbelt/crytic-export/etherscan-contracts/0xd92023E9d9911199a6711321D1277285e6d4e2db-TransparentUpgradeableProxy' running
```

Runs slither against the verified contracts  Passed

Checks Compound Proposal Details  Passed

Info:

1. Bridge wrapped actions to Arbitrum

- a.  Set factory of [WETH](#) to [CometFactory](#).,
- b.  Set configuration for [WETH](#) to:

Parameter	Value	Raw Value
Governor	[Timelock]	0x3fB4d38ea7EC20D91917c09591490E
PauseGuardian	0x78E6317DD6D43DdbDa00Dce32C2CbaFc99361a9d	0x78E6317DD6D43DdbDa00Dce32C2C
BaseToken	WETH	0x82aF49447D8a07e3bd95BD0d56f352
BaseToken PriceFeed	PriceFeed	0xdB7EdFa090061D9367CbEAF6bE16E
ExtensionDelegate	0x5404872d8f2e24b230EC9B9eC64E3855F637FB93	0x5404872d8f2e24b230EC9B9eC64E38
SupplyKink	85%	850000000000000000
SupplyPerYearInterestRateSlopeLow	0.0185%	185000000000000000
SupplyPerYearInterestRateSlopeHigh	1%	1000000000000000000
SupplyPerYearInterestRateBase	0%	0
BorrowKink	85%	850000000000000000
BorrowPerYearInterestRateSlopeLow	0.014%	140000000000000000
BorrowPerYearInterestRateSlopeHigh	1.149999999999999872%	114999999999999872
BorrowPerYearInterestRateBase	0.01%	100000000000000000
StoreFrontPriceFactor	70%	700000000000000000
TrackingIndexScale	1	100000000000000000
BaseTrackingSupplySpeed	5.9999999999616	69444444444
BaseTrackingBorrowSpeed	3.9999999999744	46296296296
BaseMinForRewards	1,000	10000000000000000000
BaseBorrowMin	0.1	1000000000000000000
TargetReserves	5,000	50000000000000000000

Asset Configuration for [weETH](#):

Parameter	Value	Raw Value
Asset	weETH	0x35751007a407ca6FEFFe80b3cB397736D2cf4dbe
PriceFeed	PriceFeed	0x2c7118c4C88B9841FCF839074c26Ae8f035f2921
Decimals	18	-
BorrowCollateralFactor	82%	820000000000000000
LiquidateCollateralFactor	87%	870000000000000000
LiquidationFactor	92%	920000000000000000
SupplyCap	550	550000000000000000

Asset Configuration for [rETH](#):

Parameter	Value	Raw Value
Asset	rETH	0xEC70Dcb4A1EFa46b8F2D97C310C9c4790ba5ffA8
PriceFeed	PriceFeed	0x970FFD8E335B8fa4cd5c869c7caC3a90671d5Dc3
Decimals	18	-
BorrowCollateralFactor	90%	900000000000000000
LiquidateCollateralFactor	93%	930000000000000000
LiquidationFactor	97%	970000000000000000
SupplyCap	800	800000000000000000

Asset Configuration for [wstETH](#):

Parameter	Value	Raw Value
Asset	wstETH	0x5979D7b546E38E414F7E9822514be443A4800529
PriceFeed	PriceFeed	0x8D38A3d6B3c3B7d96D6536DA7Eef94A9d7dbC991
Decimals	18	-
BorrowCollateralFactor	88%	880000000000000000
LiquidateCollateralFactor	93%	930000000000000000
LiquidationFactor	97%	970000000000000000
SupplyCap	2,000	2000000000000000000

c. Deploy and upgrade new implementation for [WETH](#) via [Configurator](#).

d. ⚠ Set reward token for market [WETH](#) as [COMP](#).

2. Wrap **10 ETH** to [WETH](#).

3. **0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2.approve(address,uint256)** called with :
(0xd92023E9d9911199a6711321D1277285e6d4e2db,1000000000000000000)

4.

0x72ce9c846789fdb6fc1f34ac4ad25dd9ef7031ef.outboundTransfer(0xC02aaA39b223FE8D0A0e5C4F27eAD9083C756Cc2,0x6f7D514bbD4aFf3BcD1140B;
and Transfer 0.000898565 ETH to 0x72ce9c846789fdb6fc1f34ac4ad25dd9ef7031ef

5. Set ENS text for v3-additional-grants.compound-community-licenses.eth with key: v3-official-markets and updates:

```
{
  42161: [
    ...
    ...
+   {
+     baseSymbol: "WETH"
+     cometAddress: "0x6f7D514bbD4aFf3BcD1140B7344b32f063dEe486"
+   }
+ ]
}
```