

# Update Mid-TVL cToken Implementations

Updated as of block [19334077](#) at 2/29/2024, 10:31:23 AM ET

- ID: 101
- Proposer: [0x589CDCf60aea6B961720214e80b713eB66B89A4d](#)
- Start Block: 14611899 (4/18/2022, 6:50:14 PM ET)
- End Block: 14631609 (4/21/2022, 8:52:40 PM ET)
- Targets: [0x95b4eF2869eBD94BEb4eEE400a99824BF5DC325b](#) ;  
[0xFAce851a4921ce59e912d19329929CE6da6EB0c7](#) ;  
[0x70e36f6BF80a52b3B46b3aF8e106CC0ed743E8e4](#) ;  
[0x12392F67bdf24faE0AF363c24aC620a2f67DAd86](#) ;  
[0x35A18000230DA775CAc24873d00Ff85BccdeD550](#)

## Forum Post

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

## Table of contents

- [Proposal Text](#)
- [Checks](#)
  - [Checks Compound Proposal Details](#)  Passed

## Proposal Text

### Update Mid-TVL cToken Implementations

#### Summary

This proposal is a patch developed by Equilibria which updates the cToken implementation contract for mid TVL assets. The new implementation has been deployed to [0x3363BAe2Fc44dA742Df13CD3ee94b6bB868ea376](#).

#### Changelog

These changes implement the following:

- Upgrade the Solidity version of the cToken and related contracts to 0.8.10 - all contracts in the repo were changed to 0.8.10 but only the cTokens will be upgraded as part of upcoming governance proposals. This is due to the complexity of having multiple Solidity versions in the same repo.
- Remove the usage of SafeMath and CarefulMath in favor of Solidity 0.8's checked math - Solidity will now automatically revert when math errors occur (overflows, division by zero, etc)
- Remove the custom errorCode return values in favor of reverts and custom errors - this allows for a more structured way to deal with errors rather than enum or string comparisons.

The last batch of cTokens will be upgraded in a future proposal if this one passes and causes no issues.

The previous upgrade can be seen here: [Proposal 96](#)

#### Development






The code changes can be viewed here: [Pull Request #152](#).

Audits of these changes were completed by ChainSecurity and OpenZeppelin and all issues were either fixed or out of scope for this change. For further discussion, please view the [Community Forum thread](#).

## Checks

### Checks Compound Proposal Details Passed

#### Info:

- 1-  Function `_setImplementation(address,bool,bytes)` is removed from `0x95b4ef2869ebd94beb4eee400a99824bf5dc325b` contract
- 2-  Function `_setImplementation(address,bool,bytes)` is removed from `0xfac851a4921ce59e912d19329929ce6da6eb0c7` contract
- 3-  Function `_setImplementation(address,bool,bytes)` is removed from `0x70e36f6bf80a52b3b46b3af8e106cc0ed743e8e4` contract
- 4-  Function `_setImplementation(address,bool,bytes)` is removed from `0x12392f67bdf24fae0af363c24ac620a2f67dad86` contract
- 5-  Function `_setImplementation(address,bool,bytes)` is removed from `0x35a18000230da775cac24873d00ff85bccded550` contract