

Count Transfer Manager

- **Contract name:** CountTransferManager.sol
- **Type:** Transfer Manager Module
- **Compatible Protocol Version:** TBD
- **Associated LucidChart:** TBD
- **Github Repo:** <https://github.com/PolymathNetwork/polymath-core/blob/master/contracts/modules/TransferManager/CountTransferManager.sol>

How it works

Summary: This contract is a transfer manager for limiting the maximum number of token holders.

// The maximum number of concurrent token holders

Key functionalities (as defined in the Smart Contract)

Initialization

Configure

Summary: This function is used to initialize the variables on the entire contract

```
/**
 * @notice Used to initialize the variables of the contract
 *
 * @param _maxHolderCount Maximum no. of holders this module allows the SecurityToken to have
 */
function configure(uint256 _maxHolderCount) public onlyFactory
```

Transfer Restriction

Summary: This function is used to verify the transfer transaction and prevent a transfer if it passes the allowed amount of the token holders limit.

```
/**
 * @notice Used to verify the transfer transaction and prevent a transfer if it passes the allowed amount of token holders
 *
 * @param _from Address of the sender
 * @param _to Address of the receiver
 * @param _amount Amount to send
 */
function executeTransfer(
    address _from,
    address _to,
    uint256 _amount,
    bytes calldata /*_data*/
)
    external
    returns(Result)
```

ChangeHolderCount

Summary: This function allows the issuer to set the cap for the amount of token holders there can be for an STO.

```
/**
 * @notice Sets the cap for the amount of token holders there can be
 *
 * @param _maxHolderCount is the new maximum amount of token holders
 */
```

```
function changeHolderCount(uint256 _maxHolderCount) public  
withPerm(ADMIN)
```

Get Permissions

Summary: This function returns the permissions flag associated with the Count Transfer Manager.

```
/**  
 * @notice Returns the permissions flag  
 */  
function getPermissions()  
  
}
```

Special considerations / notes

None

Troubleshooting / FAQs

None

Known Issues / bugs

None

Changelog

(2.1.0)

Added/Changed:

The Count TM allowed an investor to transfer all their tokens to another address when limit was naturally reached (no. Of investors = limit) but it did not allow this to happen when number of investor became more than the limit by force transfer. We've now updated the verifyTransfer function so that when a maximum holder

amount is reached, one of the original holders can transfer all his tokens to a new holder (not in the count list) and then the original holder will be removed.