

RewardsController

RewardsController

All rewards type enabled in Aave V3 are managed by [RewardsDistributor.sol](#) . This is the contract used to check rewards data, user's rewards balance and for claiming the rewards.

Structs

AssetData

Name Type rewards mapping(address ⇒ RewardData) availableRewards address[] decimals uint8

RewardsData

Name Type emissionPerSecond uint88 index uint104 lastUpdateTimestamp uint32 distributionEnd uint32 usersIndex mapping(address ⇒ uint256)

View Methods

getRewardsData

getRewardsData (asset, reward)

Get the data of the reward emitted for the asset.

Call Params

Name Type Description asset address address of the a/s/v Tokens for which incentive information is requested reward address address of the reward token Return Value

Type Description uint104 index of the reward token uint88 total reward tokens awarded per second for the given asset pool uint32 unix timestamp of last time the emissions were updated uint32 unix timestamp of when the emissions will end

getRewardsByAsset

getRewardsByAsset (asset)

Get list of rewards activated for the asset

Call Params

Name Type Description asset address address of the a/s/vTokens for which incentive rewards list is requested Return Value

Type Description address[] list of reward token addresses activated for the given asset

Write Methods

claimRewards

claimRewards (assets, amount, to, reward)

Claims single reward type specified byreward for the list of assets. Rewards are received byto address.

Call Params

Name Type Description assets address[] address list of assets for which rewards are being claimed. Pass a/s/vToken addresses amount uint256 amount to claim, expressed in wei. Pass MAX_UINT to claim entire unclaimed reward balance to address address which will receive the reward tokens reward address address of the reward token being claimed. eg. stkAaave

claimRewardsOnBehalf

claimRewardsOnBehalfOf (assets, amount, user, to, reward)

Claims single reward type specified byreward for the given list of assets on behalf of theuser . Rewards are received byto address.

Thmsg.sender must be an authorised claimer set usingsetClaimer() method, via Governance Vote. Call Params

Name Type Description assets address[] address list of assets for which rewards are being claimed. Pass a/s/vToken

addresses amount uint256 amount to claim, expressed in wei. Pass MAX_UINT to claim entire unclaimed reward balance
user address address of user who's rewards are being claimed to address address which will receive the reward tokens
reward address address of the reward token being claimed. eg. stkAaave

claimRewardsToSelf

claimRewardsToSelf (assets, amount, reward)

Claims single reward type accrued by themsg.sender specified byreward for the given list of assets. Rewards are received bymsg.sender .

Call Params

Name Type Description assets address[] address list of assets for which rewards are being claimed. Pass a/s/vToken
addresses amount uint256 amount to claim, expressed in wei. Pass MAX_UINT to claim entire unclaimed reward balance
reward address address of the reward token being claimed. eg. stkAaave

claimAllRewards

claimAllRewards (assets, to)

Claims all rewards for the list of assets. Rewards are received byto address.

Call Params

Name Type Description assets address[] address list of assets for which rewards are being claimed. Pass a/s/vToken
addresses to address address which will receive the reward tokens

claimAllRewardsOnBehalf

claimAllRewardsOnBehalfOf (assets, user, to)

Claims all rewards for the given list of assets on behalf of theuser . Rewards are received byto address.

Themsg.sender must be an authorised claimer set usingsetClaimer() method, via Governance Vote. Call Params

Name Type Description assets address[] address list of assets for which rewards are being claimed. Pass a/s/vToken
addresses user address address of user who's rewards are being claimed reward address address of the reward token
being claimed. eg. stkAaave

claimAllRewardsToSelf

claimAllRewardsToSelf (assets)

Claims all rewards accrued bymsg.sender for the given list of assets. Rewards are received bymsg.sender .

Call Params

Name Type Description assets address[] address list of assets for which rewards are being claimed. Pass a/s/vToken
addresses

ABI

RewardsController ABI ``

Copy [{ "inputs": [{ "internalType": "address", "name": "emissionManager", "type": "address" }], "stateMutability":
"nonpayable", "type": "constructor" }, { "anonymous": false, "inputs": [{ "indexed": true, "internalType": "address", "name":
"asset", "type": "address" }, { "indexed": true, "internalType": "address", "name": "reward", "type": "address" }, { "indexed":
true, "internalType": "address", "name": "user", "type": "address" }, { "indexed": false, "internalType": "uint256", "name":
"assetIndex", "type": "uint256" }, { "indexed": false, "internalType": "uint256", "name": "userIndex", "type": "uint256" }, {
"indexed": false, "internalType": "uint256", "name": "rewardsAccrued", "type": "uint256" }], "name": "Accrued", "type": "event"
}, { "anonymous": false, "inputs": [{ "indexed": true, "internalType": "address", "name": "asset", "type": "address" }, {
"indexed": true, "internalType": "address", "name": "reward", "type": "address" }, { "indexed": false, "internalType": "uint256",
"name": "oldEmission", "type": "uint256" }, { "indexed": false, "internalType": "uint256", "name": "newEmission", "type":
"uint256" }, { "indexed": false, "internalType": "uint256", "name": "oldDistributionEnd", "type": "uint256" }, { "indexed": false,
"internalType": "uint256", "name": "newDistributionEnd", "type": "uint256" }, { "indexed": false, "internalType": "uint256",
"name": "assetIndex", "type": "uint256" }], "name": "AssetConfigUpdated", "type": "event" }, { "anonymous": false, "inputs": [{
"indexed": true, "internalType": "address", "name": "user", "type": "address" }, { "indexed": true, "internalType": "address",
"name": "claimer", "type": "address" }], "name": "ClaimerSet", "type": "event" }, { "anonymous": false, "inputs": [{ "indexed":
true, "internalType": "address", "name": "oldEmissionManager", "type": "address" }, { "indexed": true, "internalType":
"address", "name": "newEmissionManager", "type": "address" }], "name": "EmissionManagerUpdated", "type": "event" }, {
"anonymous": false, "inputs": [{ "indexed": true, "internalType": "address", "name": "reward", "type": "address" }, { "indexed":

```
true, "internalType": "address", "name": "rewardOracle", "type": "address"}, { "name": "RewardOracleUpdated", "type":  
"event" }, { "anonymous": false, "inputs": [ { "indexed": true, "internalType": "address", "name": "user", "type": "address" }, {  
"indexed": true, "internalType": "address", "name": "reward", "type": "address" }, { "indexed": true, "internalType": "address",  
"name": "to", "type": "address" }, { "indexed": false, "internalType": "address", "name": "claimer", "type": "address" }, {  
"indexed": false, "internalType": "uint256", "name": "amount", "type": "uint256" } ], "name": "RewardsClaimed", "type": "event"  
}, { "anonymous": false, "inputs": [ { "indexed": true, "internalType": "address", "name": "reward", "type": "address" }, {  
"indexed": true, "internalType": "address", "name": "transferStrategy", "type": "address" } ], "name":  
"TransferStrategyInstalled", "type": "event" }, { "inputs": [], "name": "REVISION", "outputs": [ { "internalType": "uint256",  
"name": "", "type": "uint256" } ], "stateMutability": "view", "type": "function" }, { "inputs": [ { "internalType": "address[]", "name":  
"assets", "type": "address[]" }, { "internalType": "address", "name": "to", "type": "address" } ], "name": "claimAllRewards",  
"outputs": [ { "internalType": "address[]", "name": "rewardsList", "type": "address[]" }, { "internalType": "uint256[]", "name":  
"claimedAmounts", "type": "uint256[]" } ], "stateMutability": "nonpayable", "type": "function" }, { "inputs": [ { "internalType":  
"address[]", "name": "assets", "type": "address[]" }, { "internalType": "address", "name": "user", "type": "address" }, {  
"internalType": "address", "name": "to", "type": "address" } ], "name": "claimAllRewardsOnBehalf", "outputs": [ {  
"internalType": "address[]", "name": "rewardsList", "type": "address[]" }, { "internalType": "uint256[]", "name":  
"claimedAmounts", "type": "uint256[]" } ], "stateMutability": "nonpayable", "type": "function" }, { "inputs": [ { "internalType":  
"address[]", "name": "assets", "type": "address[]" } ], "name": "claimAllRewardsToSelf", "outputs": [ { "internalType":  
"address[]", "name": "rewardsList", "type": "address[]" }, { "internalType": "uint256[]", "name": "claimedAmounts", "type":  
"uint256[]" } ], "stateMutability": "nonpayable", "type": "function" }, { "inputs": [ { "internalType": "address[]", "name": "assets",  
"type": "address[]" }, { "internalType": "address", "name": "user", "type": "address" }, { "internalType": "address", "name": "to",  
"type": "address" }, { "internalType": "address", "name": "reward", "type": "address" } ], "name": "claimRewardsOnBehalf",  
"outputs": [ { "internalType": "uint256", "name": "", "type": "uint256" } ], "stateMutability": "nonpayable", "type": "function" }, {  
"inputs": [ { "internalType": "address[]", "name": "assets", "type": "address[]" }, { "internalType": "uint256", "name": "amount",  
"type": "uint256" }, { "internalType": "address", "name": "reward", "type": "address" } ], "name": "claimRewardsToSelf",  
"outputs": [ { "internalType": "uint256", "name": "", "type": "uint256" } ], "stateMutability": "nonpayable", "type": "function" }, {  
"inputs": [ { "components": [ { "internalType": "uint88", "name": "emissionPerSecond", "type": "uint88" }, { "internalType":  
"uint256", "name": "totalSupply", "type": "uint256" }, { "internalType": "uint32", "name": "distributionEnd", "type": "uint32" }, {  
"internalType": "address", "name": "asset", "type": "address" }, { "internalType": "address", "name": "reward", "type":  
"address" }, { "internalType": "contract ITransferStrategyBase", "name": "transferStrategy", "type": "address" }, {  
"internalType": "contract IEACAggregatorProxy", "name": "rewardOracle", "type": "address" } ], "internalType": "struct  
RewardsDataTypes.RewardsConfigInput[]", "name": "config", "type": "tuple[]" } ], "name": "configureAssets", "outputs": [],  
"stateMutability": "nonpayable", "type": "function" }, { "inputs": [ { "internalType": "address[]", "name": "assets", "type":  
"address[]" }, { "internalType": "address", "name": "user", "type": "address" } ], "name": "getAllUserRewards", "outputs": [ {  
"internalType": "address[]", "name": "rewardsList", "type": "address[]" }, { "internalType": "uint256[]", "name":  
"unclaimedAmounts", "type": "uint256[]" } ], "stateMutability": "view", "type": "function" }, { "inputs": [ { "internalType":  
"address", "name": "asset", "type": "address" } ], "name": "getAssetDecimals", "outputs": [ { "internalType": "uint8", "name": "",  
"type": "uint8" } ], "stateMutability": "view", "type": "function" }, { "inputs": [ { "internalType": "address", "name": "user", "type":  
"address" } ], "name": "getClaimer", "outputs": [ { "internalType": "address", "name": "", "type": "address" } ], "stateMutability":  
"view", "type": "function" }, { "inputs": [ { "internalType": "address", "name": "asset", "type": "address" }, { "internalType":  
"address", "name": "reward", "type": "address" } ], "name": "getDistributionEnd", "outputs": [ { "internalType": "uint256",  
"name": "", "type": "uint256" } ], "stateMutability": "view", "type": "function" }, { "inputs": [], "name": "getEmissionManager",  
"outputs": [ { "internalType": "address", "name": "", "type": "address" } ], "stateMutability": "view", "type": "function" }, {  
"inputs": [ { "internalType": "address", "name": "reward", "type": "address" } ], "name": "getRewardOracle", "outputs": [ {  
"internalType": "address", "name": "", "type": "address" } ], "stateMutability": "view", "type": "function" }, { "inputs": [ {  
"internalType": "address", "name": "asset", "type": "address" } ], "name": "getRewardsByAsset", "outputs": [ { "internalType":  
"address[]", "name": "", "type": "address[]" } ], "stateMutability": "view", "type": "function" }, { "inputs": [ { "internalType":  
"address", "name": "asset", "type": "address" }, { "internalType": "address", "name": "reward", "type": "address" } ], "name":  
"getRewardsData", "outputs": [ { "internalType": "uint256", "name": "", "type": "uint256" }, { "internalType": "uint256", "name":  
"", "type": "uint256" }, { "internalType": "uint256", "name": "", "type": "uint256" }, { "internalType": "uint256", "name": "", "type":  
"uint256" } ], "stateMutability": "view", "type": "function" }, { "inputs": [], "name": "getRewardsList", "outputs": [ { "internalType":  
"address[]", "name": "", "type": "address[]" } ], "stateMutability": "view", "type": "function" }, { "inputs": [ { "internalType":  
"address", "name": "reward", "type": "address" } ], "name": "getTransferStrategy", "outputs": [ { "internalType": "address",  
"name": "", "type": "address" } ], "stateMutability": "view", "type": "function" }, { "inputs": [ { "internalType": "address", "name":  
"user", "type": "address" }, { "internalType": "address", "name": "reward", "type": "address" } ], "name":  
"getUserAccruedRewards", "outputs": [ { "internalType": "uint256", "name": "", "type": "uint256" } ], "stateMutability": "view",  
"type": "function" }, { "inputs": [ { "internalType": "address", "name": "user", "type": "address" }, { "internalType": "address",  
"name": "asset", "type": "address" }, { "internalType": "address", "name": "reward", "type": "address" } ], "name":  
"getUserAssetIndex", "outputs": [ { "internalType": "uint256", "name": "", "type": "uint256" } ], "stateMutability": "view", "type":  
"function" }, { "inputs": [ { "internalType": "address[]", "name": "assets", "type": "address[]" }, { "internalType": "address",  
"name": "user", "type": "address" }, { "internalType": "address", "name": "reward", "type": "address" } ], "name":  
"getUserRewards", "outputs": [ { "internalType": "uint256", "name": "", "type": "uint256" } ], "stateMutability": "view", "type":  
"function" }, { "inputs": [ { "internalType": "address", "name": "user", "type": "address" }, { "internalType": "uint256", "name":  
"totalSupply", "type": "uint256" }, { "internalType": "uint256", "name": "userBalance", "type": "uint256" } ], "name":  
"handleAction", "outputs": [], "stateMutability": "nonpayable", "type": "function" }, { "inputs": [ { "internalType": "address"
```

```

"name": "emissionManager", "type": "address" } ], "name": "initialize", "outputs": [], "stateMutability": "nonpayable", "type":
"function" }, { "inputs": [ { "internalType": "address", "name": "user", "type": "address" }, { "internalType": "address", "name":
"caller", "type": "address" } ], "name": "setClaimer", "outputs": [], "stateMutability": "nonpayable", "type": "function" }, {
"inputs": [ { "internalType": "address", "name": "asset", "type": "address" }, { "internalType": "address", "name": "reward",
"type": "address" }, { "internalType": "uint32", "name": "newDistributionEnd", "type": "uint32" } ], "name": "setDistributionEnd",
"outputs": [], "stateMutability": "nonpayable", "type": "function" }, { "inputs": [ { "internalType": "address", "name":
"emissionManager", "type": "address" } ], "name": "setEmissionManager", "outputs": [], "stateMutability": "nonpayable",
"type": "function" }, { "inputs": [ { "internalType": "address", "name": "asset", "type": "address" }, { "internalType": "address[]",
"name": "rewards", "type": "address[]" }, { "internalType": "uint88[]", "name": "newEmissionsPerSecond", "type": "uint88[]" } ],
"name": "setEmissionPerSecond", "outputs": [], "stateMutability": "nonpayable", "type": "function" }, { "inputs": [ {
"internalType": "address", "name": "reward", "type": "address" }, { "internalType": "contract IEACAggregatorProxy", "name":
"rewardOracle", "type": "address" } ], "name": "setRewardOracle", "outputs": [], "stateMutability": "nonpayable", "type":
"function" }, { "inputs": [ { "internalType": "address", "name": "reward", "type": "address" }, { "internalType": "contract
ITransferStrategyBase", "name": "transferStrategy", "type": "address" } ], "name": "setTransferStrategy", "outputs": [],
"stateMutability": "nonpayable", "type": "function" } ]

```

...

[Previous AaveOracle](#) [Next UiIncentiveDataProviderV3](#) Last updated 1 year ago On this page * [RewardsController](#) * [Structs](#) * [AssetData](#) * [RewardsData](#) * [View Methods](#) * [getRewardsData](#) * [getRewardsByAsset](#) * [Write Methods](#) * [claimRewards](#) * [claimRewardsOnBehalf](#) * [claimRewardsToSelf](#) * [claimAllRewards](#) * [claimAllRewardsOnBehalf](#) * [claimAllRewardsToSelf](#) * [ABI](#)

Was this helpful?