## Module sui\_system::validator

Event emitted when a new stake request is received.

Event emitted when a new unstake request is received.

Event emitted when a staked SUI is converted to a fungible staked SUI.

Event emitted when a fungible staked SUI is redeemed.

Invalid proof of possession field in ValidatorMetadata

Invalid pubkey\_bytes field in ValidatorMetadata

Invalid network pubkey bytes field in ValidatorMetadata

Invalid worker pubkey bytes field in ValidatorMetadata

Invalid net address field in ValidatorMetadata

Invalid p2p address field in ValidatorMetadata

Invalid primary\_address field in ValidatorMetadata

Invalid worker\_address field in ValidatorMetadata

Commission rate set by the validator is higher than the threshold

Validator Metadata is too long

Intended validator is not a candidate one.

Stake amount is invalid or wrong.

Function called during non-genesis times.

New Capability is not created by the validator itself

Capability code is not valid

Validator trying to set gas price higher than threshold.

Max gas price a validator can set is 100K MIST.

Deactivate this validator's staking pool

Process pending stake and pending withdraws, and update the gas price.

Request to add stake to the validator's staking pool, processed at the end of the epoch.

Request to add stake to the validator's staking pool at genesis

Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.

Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.

Set new gas price for the candidate validator.

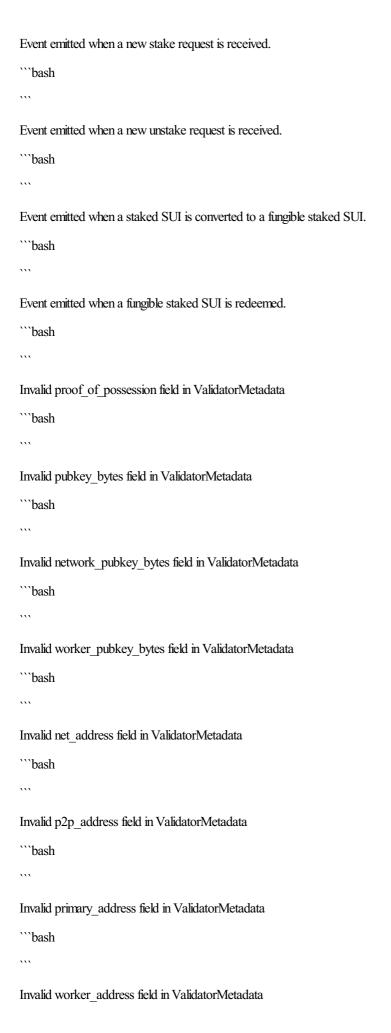
Request to set new commission rate for the next epoch.

Set new commission rate for the candidate validator.

Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.

Process pending stakes and withdraws, called at the end of the epoch.

Returns true if the validator is preactive. Return the total amount staked with this validator Return the voting power of this validator. Set the voting power of this validator, called only from validator\_set. Create a new Unverified Validator Operation Cap, transfer to the validator, and registers it, thus revoking the previous cap's permission. Update name of the validator. Update description of the validator. Update image url of the validator. Update project url of the validator. Update network address of this validator, taking effects from next epoch Update network address of this candidate validator Update p2p address of this validator, taking effects from next epoch Update p2p address of this candidate validator Update primary address of this validator, taking effects from next epoch Update primary address of this candidate validator Update worker address of this validator, taking effects from next epoch Update worker address of this candidate validator Update protocol public key of this validator, taking effects from next epoch Update protocol public key of this candidate validator Update network public key of this validator, taking effects from next epoch Update network public key of this candidate validator Update Narwhal worker public key of this validator, taking effects from next epoch Update Narwhal worker public key of this candidate validator Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when advancing an epoch. Helper macro which extracts the value from Some and applies \$f to it. Aborts if validator metadata is valid Create a new validator from the given Validator Metadata, called by both new and new for testing. Struct ```bash ```bash



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Commission rate set by the validator is higher than the threshold
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Validator Metadata is too long
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Intended validator is not a candidate one.
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Stake amount is invalid or wrong.
```bash
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Function called during non-genesis times.
```bash
New Capability is not created by the validator itself
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Capability code is not valid
```bash
Validator trying to set gas price higher than threshold.
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Max gas price a validator can set is 100K MIST.
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bash (package)
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bash (package)
bash (package)
bash (package)
Deactivate this validator's staking pool
bash (package)
bash (package)
bash (package)
bash (package)
Process pending stake and pending withdraws, and update the gas price.
bash (package)
bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
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Request to add stake to the validator's staking pool at genesis
bash (package)
bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
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bash (package)
Request to set new commission rate for the next epoch.
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bash (package)
Set new commission rate for the candidate validator.
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Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.

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bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
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Update name of the validator.
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bash (package)
Update description of the validator.
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bash (package)
Update image url of the validator.
bash (package)

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bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
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bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
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Update network public key of this validator, taking effects from next epoch
bash (package)
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bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
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```bash
Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for testing.
```bash
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Update network public key of this candidate validator

#### **Struct**

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```bash
***
Event emitted when a new stake request is received.
```bash
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Event emitted when a new unstake request is received.
```bash
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Event emitted when a staked SUI is converted to a fungible staked SUI.
```bash
***
Event emitted when a fungible staked SUI is redeemed.
```bash
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Invalid proof_of_possession field in ValidatorMetadata
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Invalid pubkey_bytes field in ValidatorMetadata
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Invalid network_pubkey_bytes field in ValidatorMetadata
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Invalid worker_pubkey_bytes field in ValidatorMetadata
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Invalid net_address field in ValidatorMetadata
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Invalid p2p_address field in ValidatorMetadata
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Invalid primary address field in ValidatorMetadata
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Invalid worker_address field in ValidatorMetadata
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***
Commission rate set by the validator is higher than the threshold
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Validator Metadata is too long
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***
Intended validator is not a candidate one.
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***
Stake amount is invalid or wrong.
```bash
Function called during non-genesis times.
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New Capability is not created by the validator itself
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Capability code is not valid
```bash
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Validator trying to set gas price higher than threshold.
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May one price a validator can set is 100% MCT
Max gas price a validator can set is 100K MIST.

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bash (package)
bash (package)
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bash (package)
Deactivate this validator's staking pool
bash (package)
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bash (package)
Process pending stake and pending withdraws, and update the gas price.
bash (package)
bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
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bash (package)
Request to add stake to the validator's staking pool at genesis
bash (package)
bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
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bash (package)
Set new commission rate for the candidate validator.
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bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
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bash (package)
Update description of the validator.
bash (package)
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# Update image url of the validator. bash (package) bash (package) Update project url of the validator. bash (package) bash (package) Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator

Update network public key of this validator, taking effects from next epoch

bash (package)
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bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
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Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
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Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
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### Struct



Invalid worker_address field in ValidatorMetadata
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Commission rate set by the validator is higher than the threshold
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***
Validator Metadata is too long
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***
Intended validator is not a candidate one.
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Stake amount is invalid or wrong.
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Function called during non-genesis times.
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New Capability is not created by the validator itself
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Capability code is not valid
```bash
***
Validator trying to set gas price higher than threshold.
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Max gas price a validator can set is 100K MIST.
```bash

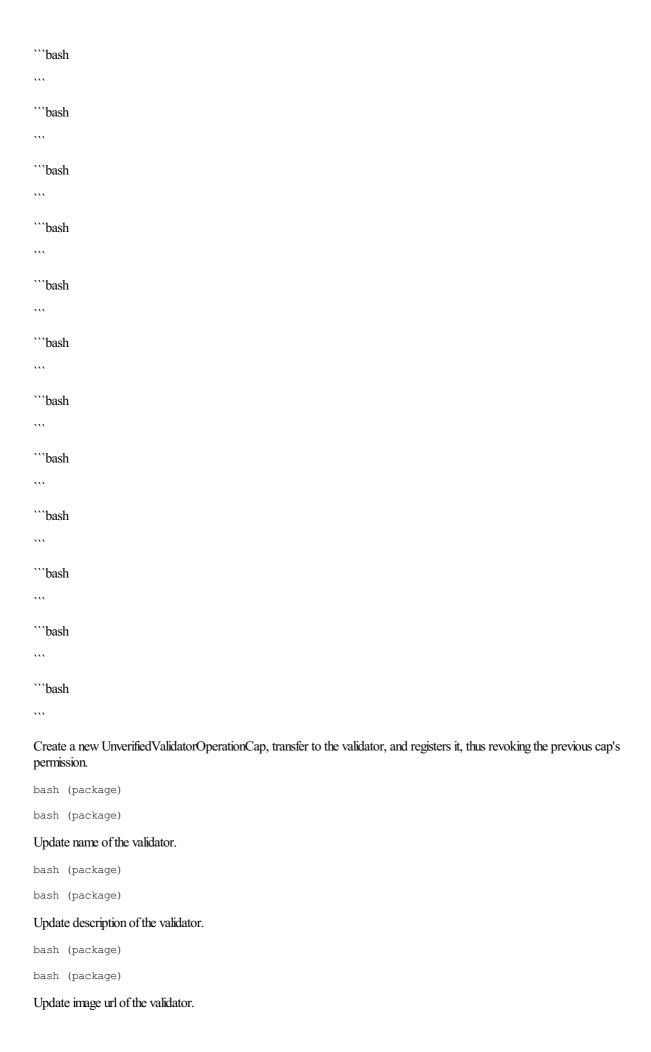
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bash (package)
bash (package)
bash (package)
bash (package)
Deactivate this validator's staking pool
bash (package)
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bash (package)
Process pending stake and pending withdraws, and update the gas price.
bash (package)
bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
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Request to add stake to the validator's staking pool at genesis
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Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
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Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
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bash (package)
Request to set new commission rate for the next epoch.
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Set new commission rate for the candidate validator.
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Deposit stakes rewards into the validator's staking pool, called at the end of the epoch. bash (package) bash (package) Process pending stakes and withdraws, called at the end of the epoch. bash (package) bash (package) Returns true if the validator is preactive. ```bash \*\*\* ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash ```bash

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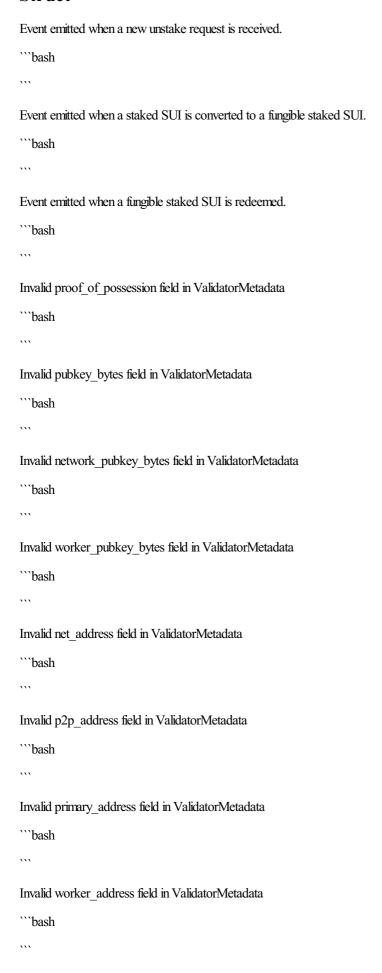
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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bash (package)
Update project url of the validator.
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Update network address of this validator, taking effects from next epoch
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Update network address of this candidate validator
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Update p2p address of this validator, taking effects from next epoch
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Update p2p address of this candidate validator
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Update primary address of this validator, taking effects from next epoch
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Update primary address of this candidate validator
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Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
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Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
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Update network public key of this validator, taking effects from next epoch
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bash (package)
Update network public key of this candidate validator
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Update Narwhal worker public key of this validator, taking effects from next epoch
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Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
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Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
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### Struct



$Commission\ rate\ set\ by\ the\ validator\ is\ higher\ than\ the\ threshold$
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Validator Metadata is too long
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Intended validator is not a candidate one.
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Stake amount is invalid or wrong.
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Function called during non-genesis times.
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New Capability is not created by the validator itself
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Capability code is not valid
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Validator trying to set gas price higher than threshold.
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Max gas price a validator can set is 100K MIST.
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bash (package)
Deactivate this validator's staking pool
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bash (package)
Process pending stake and pending withdraws, and update the gas price.
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bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
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Request to add stake to the validator's staking pool at genesis
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bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
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Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
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Set new gas price for the candidate validator.
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Request to set new commission rate for the next epoch.
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Set new commission rate for the candidate validator.
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Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
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Process pending stakes and withdraws, called at the end of the epoch. bash (package) bash (package) Returns true if the validator is preactive. ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\*

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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
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Update description of the validator.
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Update image url of the validator.
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Update project url of the validator.
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bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
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Update network address of this candidate validator
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Update p2p address of this validator, taking effects from next epoch
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Update p2p address of this candidate validator
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bash (package)
Update primary address of this validator, taking effects from next epoch
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Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
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bash (package)
Update network public key of this candidate validator
```

```
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
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Struct
Event emitted when a staked SUI is converted to a fungible staked SUI.
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```bash

```
Event emitted when a fungible staked SUI is redeemed.
```bash
Invalid proof_of_possession field in ValidatorMetadata
```bash
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Invalid pubkey_bytes field in ValidatorMetadata
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Invalid network_pubkey_bytes field in ValidatorMetadata
```bash
Invalid worker_pubkey_bytes field in ValidatorMetadata
```bash
Invalid net_address field in ValidatorMetadata
```bash
Invalid p2p_address field in ValidatorMetadata
```bash
Invalid primary address field in ValidatorMetadata
```bash
Invalid worker_address field in ValidatorMetadata
```bash
***
Commission rate set by the validator is higher than the threshold
```bash
***
Validator Metadata is too long
```bash
```

```
Intended validator is not a candidate one.
```bash
...
Stake amount is invalid or wrong.
```bash
***
Function called during non-genesis times.
```bash
,,,
New Capability is not created by the validator itself
```bash
Capability code is not valid
```bash
***
Validator trying to set gas price higher than threshold.
```bash
***
```bash
***
```bash
Max gas price a validator can set is 100K MIST.
```bash
***
bash (package)
bash (package)
bash (package)
bash (package)
Deactivate this validator's staking pool
bash (package)
bash (package)
bash (package)
bash (package)
```

Process pending stake and pending withdraws, and update the gas price.

```
bash (package)
bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
Request to add stake to the validator's staking pool at genesis
bash (package)
bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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***
Return the total amount staked with this validator
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***
Return the voting power of this validator.
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***
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
```

## Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator bash (package) bash (package) Update network public key of this validator, taking effects from next epoch bash (package) bash (package) Update network public key of this candidate validator bash (package) bash (package) Update Narwhal worker public key of this validator, taking effects from next epoch bash (package) bash (package)

Update Narwhal worker public key of this candidate validator

bash (package)
bash (package)

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when

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advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
***
```bash
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```bash
```bash
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bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}} , called by both \underline{\text{new}} and new_for_testing.
```bash
***
```bash
Struct
Event emitted when a fungible staked SUI is redeemed.
```bash
Invalid proof of possession field in ValidatorMetadata
```bash
***
Invalid pubkey_bytes field in ValidatorMetadata
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Invalid network_pubkey_bytes field in ValidatorMetadata
```bash
Invalid worker_pubkey_bytes field in ValidatorMetadata
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Invalid net_address field in ValidatorMetadata
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Invalid p2p_address field in ValidatorMetadata
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Invalid primary_address field in ValidatorMetadata
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Invalid worker_address field in ValidatorMetadata
```bash
···
Commission rate set by the validator is higher than the threshold
```bash
···
Validator Metadata is too long
```bash
···
Intended validator is not a candidate one.
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···
Stake amount is invalid or wrong.
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Function called during non-genesis times.
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New Capability is not created by the validator itself

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Capability code is not valid
```bash
***
Validator trying to set gas price higher than threshold.
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```bash
```bash
Max gas price a validator can set is 100K MIST.
```bash
***
bash (package)
bash (package)
bash (package)
bash (package)
Deactivate this validator's staking pool
bash (package)
bash (package)
bash (package)
bash (package)
Process pending stake and pending withdraws, and update the gas price.
bash (package)
bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
Request to add stake to the validator's staking pool at genesis
bash (package)
```

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bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator	
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Return the voting power of this validator.	
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Set the voting power of this validator, called only from validator_set.
bash (package)
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
```

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bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
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bash (package)
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Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
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Constants
Invalid proof_of_possession field in ValidatorMetadata
```bash
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Invalid pubkey_bytes field in ValidatorMetadata
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***
Invalid network_pubkey_bytes field in ValidatorMetadata
```bash
Invalid worker_pubkey_bytes field in ValidatorMetadata
```bash
Invalid net_address field in ValidatorMetadata
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Invalid p2p_address field in ValidatorMetadata
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Invalid primary_address field in ValidatorMetadata
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```bash
***
Invalid worker_address field in ValidatorMetadata
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***
Commission rate set by the validator is higher than the threshold
```bash
***
Validator Metadata is too long
```bash
***
Intended validator is not a candidate one.
```bash
***
Stake amount is invalid or wrong.
```bash
Function called during non-genesis times.
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New Capability is not created by the validator itself
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Capability code is not valid
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Validator trying to set gas price higher than threshold.
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Max gas price a validator can set is 100K MIST.

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```bash
bash (package)
bash (package)
bash (package)
bash (package)
Deactivate this validator's staking pool
bash (package)
bash (package)
bash (package)
bash (package)
Process pending stake and pending withdraws, and update the gas price.
bash (package)
bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
bash (package)
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bash (package)
bash (package)
bash (package)
Request to add stake to the validator's staking pool at genesis
bash (package)
bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
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Set new commission rate for the candidate validator.

```
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
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## Update image url of the validator. bash (package) bash (package) Update project url of the validator. bash (package) bash (package) Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator

Update network public key of this validator, taking effects from next epoch

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bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
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bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
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bash (package)
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Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
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## **Function**

```
bash (package)bash (package)bash (package)
```

## Deactivate this validator's staking pool

```
bash (package)bash (package)bash (package)
```

Process pending stake and pending withdraws, and update the gas price.

```
bash (package)
bash (package)
```

Request to add stake to the validator's staking pool, processed at the end of the epoch.

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bash (package)
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bash (package)
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```

Request to add stake to the validator's staking pool at genesis

```
bash (package)
bash (package)
```

Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.

```
bash (package)
bash (package)
```

Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.

```
bash (package)
bash (package)
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Set new gas price for the candidate validator.

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bash (package)
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Request to set new commission rate for the next epoch.

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bash (package)
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Set new commission rate for the candidate validator.

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bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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```bash
Set the voting power of this validator, called only from validator_set.
bash (package)
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Update name of the validator.
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# Update image url of the validator. bash (package) bash (package) Update project url of the validator. bash (package) bash (package) Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator

Update network public key of this validator, taking effects from next epoch

bash (package)
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bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
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Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
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Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
,,,
```bash
```

bash (package)

## **Function**

```
bash (package)
bash (package)
```

#### Deactivate this validator's staking pool

```
bash (package)bash (package)bash (package)
```

Process pending stake and pending withdraws, and update the gas price.

```
bash (package)
bash (package)
```

Request to add stake to the validator's staking pool, processed at the end of the epoch.

```
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
```

Request to add stake to the validator's staking pool at genesis

```
bash (package)
bash (package)
```

Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.

```
bash (package)
bash (package)
```

Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.

```
bash (package)
bash (package)
```

Set new gas price for the candidate validator.

```
bash (package)
bash (package)
```

Request to set new commission rate for the next epoch.

```
bash (package)
bash (package)
```

Set new commission rate for the candidate validator.

```
bash (package)
bash (package)
```

Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.

```
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
```bash
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)

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bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
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bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
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bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
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```bash
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for testing.
```bash
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```

Update network public key of this candidate validator

## **Function**

#### Deactivate this validator's staking pool

```
bash (package)
bash (package)
bash (package)
bash (package)
```

Process pending stake and pending withdraws, and update the gas price.

```
bash (package)
bash (package)
```

Request to add stake to the validator's staking pool, processed at the end of the epoch.

```
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
```

Request to add stake to the validator's staking pool at genesis

```
bash (package)
bash (package)
```

Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.

```
bash (package)
bash (package)
```

Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.

```
bash (package)
bash (package)
```

Set new gas price for the candidate validator.

```
bash (package)
bash (package)
```

Request to set new commission rate for the next epoch.

```
bash (package)
bash (package)
```

Set new commission rate for the candidate validator.

```
bash (package)
bash (package)
```

Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.

```
bash (package)
bash (package)
```

Process pending stakes and withdraws, called at the end of the epoch.

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bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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```bash
Return the voting power of this validator.
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```bash
Set the voting power of this validator, called only from validator_set.
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```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)

```
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
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Update primary address of this candidate validator
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Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
bash (package)
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Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
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Update network public key of this validator, taking effects from next epoch
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Update network public key of this candidate validator
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bash (package)

Update Narwhal worker public key of this validator, taking effects from next epoch bash (package) bash (package) Update Narwhal worker public key of this candidate validator bash (package) bash (package) Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch. bash (package) bash (package) Helper macro which extracts the value from Some and applies \$f to it. ```bash ,,, ```bash Aborts if validator metadata is valid ```bash \*\*\* ```bash ```bash ```bash bash (package) bash (package) Create a new validator from the given ValidatorMetadata, called by both new and new\_for\_testing. ```bash ```bash

## **Function**

```
bash (package)
bash (package)
```

Process pending stake and pending withdraws, and update the gas price.

```
bash (package)
bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
Request to add stake to the validator's staking pool at genesis
bash (package)
bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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***
Set the voting power of this validator, called only from validator_set.
bash (package)
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```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
```

# Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator bash (package) bash (package) Update network public key of this validator, taking effects from next epoch bash (package) bash (package) Update network public key of this candidate validator bash (package) bash (package) Update Narwhal worker public key of this validator, taking effects from next epoch bash (package) bash (package)

Update Narwhal worker public key of this candidate validator

bash (package)
bash (package)

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when

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advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
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...
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
***
```bash
Function
Process pending stake and pending withdraws, and update the gas price.
bash (package)
bash (package)
Request to add stake to the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
```

bash (package)

# Request to add stake to the validator's staking pool at genesis bash (package) bash (package) Request to withdraw stake from the validator's staking pool, processed at the end of the epoch. bash (package) bash (package) Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap. bash (package) bash (package) Set new gas price for the candidate validator. bash (package) bash (package) Request to set new commission rate for the next epoch. bash (package) bash (package) Set new commission rate for the candidate validator. bash (package) bash (package) Deposit stakes rewards into the validator's staking pool, called at the end of the epoch. bash (package) bash (package) Process pending stakes and withdraws, called at the end of the epoch. bash (package) bash (package) Returns true if the validator is preactive. ```bash \*\*\* ```bash ```bash ```bash ,,, ```bash

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| Return the total amount staked with this validator |  |
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| Return the voting power of this validator.                              |
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| Set the voting power of this validator, called only from validator_set. |
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...
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
```

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bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
...
```bash
Aborts if validator metadata is valid
```

Update primary address of this candidate validator

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bash (package)
bash (package)
Create a new validator from the given Validator Metadata, called by both new and new for testing.
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Function
Request to add stake to the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
bash (package)
Request to add stake to the validator's staking pool at genesis
bash (package)
bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
```

Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.

bash (package)
bash (package)

bash (package)
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bash (package)
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Set new gas price for the candidate validator.

Request to set new commission rate for the next epoch. bash (package) bash (package) Set new commission rate for the candidate validator. bash (package) bash (package) Deposit stakes rewards into the validator's staking pool, called at the end of the epoch. bash (package) bash (package) Process pending stakes and withdraws, called at the end of the epoch. bash (package) bash (package) Returns true if the validator is preactive. ```bash ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash ```bash

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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
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```bash
$Create\ a\ new\ Unverified Validator Operation Cap,\ transfer\ to\ the\ validator,\ and\ registers\ it,\ thus\ revoking\ the\ previous\ cap's\ permission.$
bash (package)
bash (package)
Update name of the validator.

```
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
```

```
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
***
```bash
```bash
```bash
bash (package)
bash (package)
```

Create a new validator from the given ValidatorMetadata, called by both new and new\_for\_testing.

Update protocol public key of this candidate validator

```
```bash
,,,
```bash
Function
bash (package)
bash (package)
bash (package)
bash (package)
Request to add stake to the validator's staking pool at genesis
bash (package)
bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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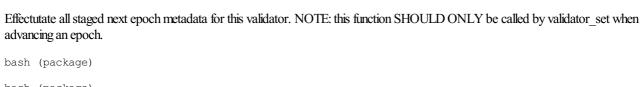
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
```

```
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
```



bash (package)

Helper macro which extracts the value from Some and applies \$f to it.

""bash

""

Aborts if validator metadata is valid

""bash

""

""bash

""

bash

(package)

bash (package)

Create a new validator from the given ValidatorMetadata, called by both new and new\_for\_testing.

```
```bash

```
```

# **Function**

```
bash (package)
bash (package)
```

Request to add stake to the validator's staking pool at genesis

```
bash (package)
bash (package)
```

Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.

```
bash (package)
bash (package)
```

Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.

```
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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```bash
Return the total amount staked with this validator
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```bash
***
Return the voting power of this validator.
```bash
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```bash
```

Set the voting power of this validator, called only from validator\_set.

bash (package)	
bash (package)	
```bash	
```bash	

Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.

```
bash (package)
bash (package)
```

#### Update name of the validator.

```
bash (package)
bash (package)
```

## Update description of the validator.

```
bash (package)
bash (package)
```

## Update image url of the validator.

```
bash (package)
bash (package)
```

#### Update project url of the validator.

```
bash (package)
bash (package)
```

## Update network address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

## Update network address of this candidate validator

```
bash (package)
bash (package)
```

## Update p2p address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

# Update p2p address of this candidate validator

```
bash (package)
bash (package)
```

#### Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

## Update primary address of this candidate validator

```
bash (package)
bash (package)
```

## Update worker address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

```
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
```bash
```bash
```

Update worker address of this candidate validator

```
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new for testing.
```bash
```bash
Function
Request to add stake to the validator's staking pool at genesis
bash (package)
bash (package)
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
```

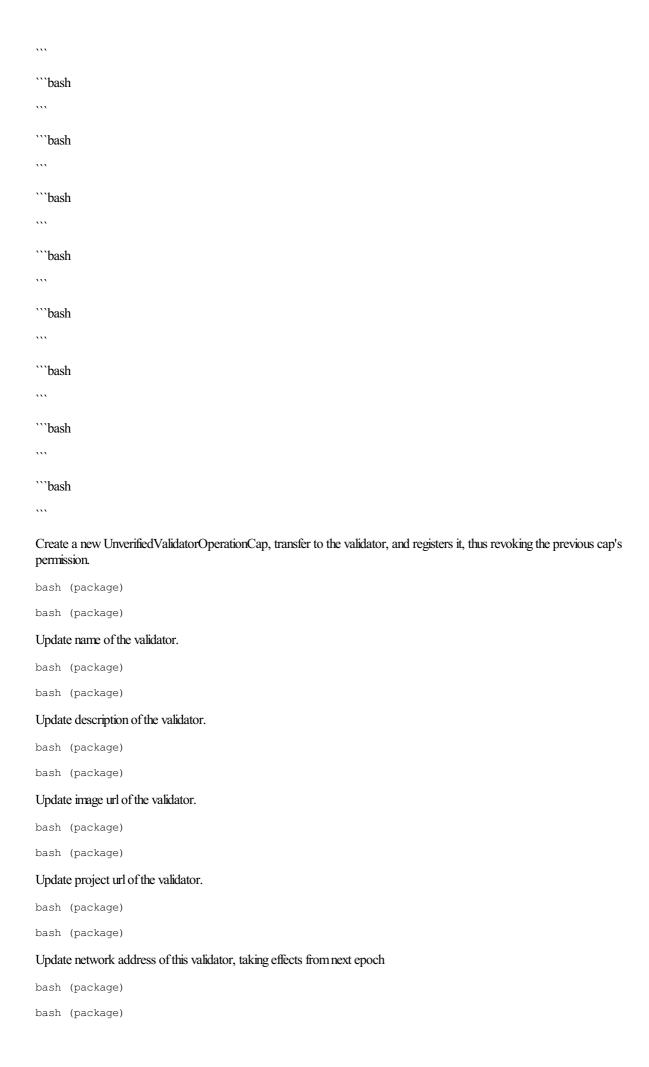
Returns true if the validator is preactive.

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***
Return the total amount staked with this validator
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Return the voting power of this validator.
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***
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
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```



# Update network address of this candidate validator bash (package)

## Update p2p address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

bash (package)

#### Update p2p address of this candidate validator

```
bash (package)
bash (package)
```

## Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

# Update primary address of this candidate validator

```
bash (package)
bash (package)
```

## Update worker address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update worker address of this candidate validator

```
bash (package)
bash (package)
```

#### Update protocol public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update protocol public key of this candidate validator

```
bash (package)
bash (package)
```

#### Update network public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update network public key of this candidate validator

```
bash (package)
bash (package)
```

## Update Narwhal worker public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update Narwhal worker public key of this candidate validator

```
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
```bash
***
```bash
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,,,
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
Function
Request to withdraw stake from the validator's staking pool, processed at the end of the epoch.
bash (package)
bash (package)
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
```

bash (package)
bash (package)

Set new gas price for the candidate validator.

```
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
```bash
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···
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.

bash (package)
bash (package)

## Update name of the validator. bash (package) bash (package) Update description of the validator. bash (package) bash (package) Update image url of the validator. bash (package) bash (package) Update project url of the validator. bash (package) bash (package) Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator

Update protocol public key of this validator, taking effects from next epoch

bash (package)
bash (package)

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bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
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Aborts if validator metadata is valid
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bash (package)
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bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
```bash
Function
Request to set new gas price for the next epoch. Need to present a ValidatorOperationCap.
bash (package)
bash (package)
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator	
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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,,,
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
```

## Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator bash (package) bash (package) Update network public key of this validator, taking effects from next epoch bash (package) bash (package) Update network public key of this candidate validator bash (package) bash (package) Update Narwhal worker public key of this validator, taking effects from next epoch bash (package)

```
bash (package)
```

Update Narwhal worker public key of this candidate validator

```
bash (package)
bash (package)
```

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when advancing an epoch.

```
bash (package)
bash (package)
```

Helper macro which extracts the value from Some and applies \$f to it.

```
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```bash
,,,
Aborts if validator metadata is valid
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```bash
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bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new for testing.
```bash
***
```bash
Function
Set new gas price for the candidate validator.
bash (package)
bash (package)
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
```

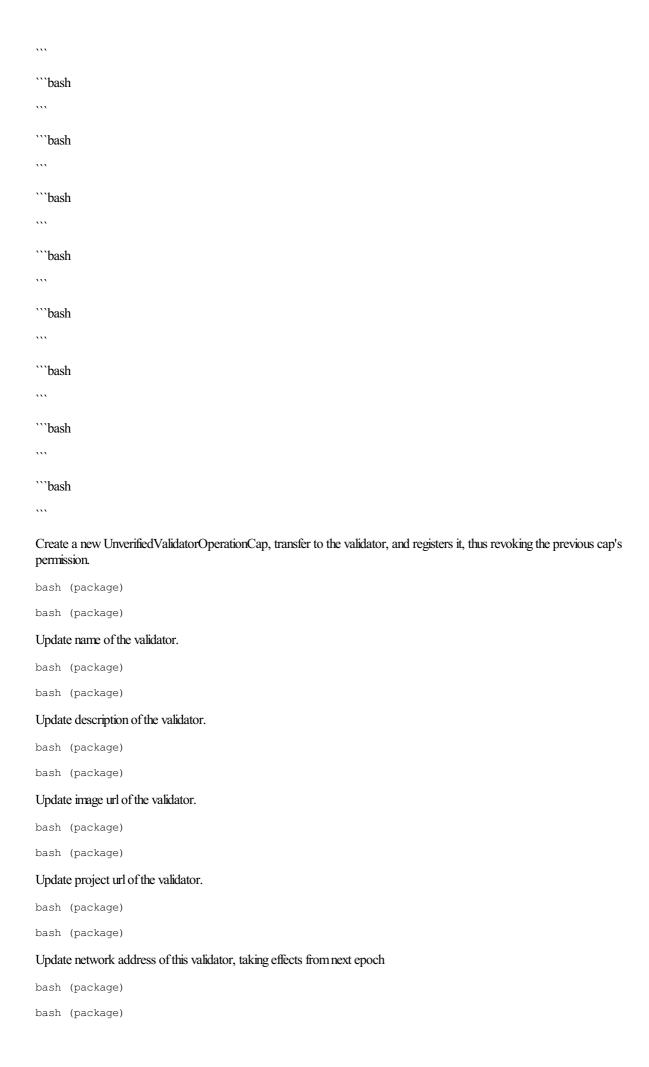
Returns true if the validator is preactive.

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***
Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
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# Update network address of this candidate validator bash (package) bash (package)

#### Update p2p address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update p2p address of this candidate validator

```
bash (package)
bash (package)
```

#### Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update primary address of this candidate validator

```
bash (package)
bash (package)
```

#### Update worker address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update worker address of this candidate validator

```
bash (package)
bash (package)
```

#### Update protocol public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update protocol public key of this candidate validator

```
bash (package)
bash (package)
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#### Update network public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update network public key of this candidate validator

```
bash (package)
bash (package)
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#### Update Narwhal worker public key of this validator, taking effects from next epoch

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bash (package)
bash (package)
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#### Update Narwhal worker public key of this candidate validator

```
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
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...
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
Function
Request to set new commission rate for the next epoch.
bash (package)
bash (package)
Set new commission rate for the candidate validator.
bash (package)
bash (package)
```

Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.

bash (package)

```
bash (package)
bash (package)
Process pending stakes and withdraws, called at the end of the epoch.
bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
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```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)

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bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
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Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
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Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
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bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
```bash
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***
```bash
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for testing.
```bash
```bash
```

Update network public key of this candidate validator

#### **Function**

bash (package) bash (package) Deposit stakes rewards into the validator's staking pool, called at the end of the epoch. bash (package) bash (package) Process pending stakes and withdraws, called at the end of the epoch. bash (package) bash (package) Returns true if the validator is preactive. ```bash \*\*\* ```bash ```bash \*\*\* ```bash ```bash ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash ```bash \*\*\* ```bash ```bash

Set new commission rate for the candidate validator.

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Return the total amount staked with this validator
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Return the voting power of this validator.
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```bash
Set the voting power of this validator, called only from validator_set.
bash (package)
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)

```
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
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Update primary address of this validator, taking effects from next epoch
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bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
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Update protocol public key of this candidate validator
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Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
```

### **Function**

Deposit stakes rewards into the validator's staking pool, called at the end of the epoch.

```
bash (package)
bash (package)
```

Process pending stakes and withdraws, called at the end of the epoch.

```
bash (package)
bash (package)
```

```bash

```
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
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bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
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Update primary address of this candidate validator
bash (package)
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Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
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Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
```

## **Function**

Process pending stakes and withdraws, called at the end of the epoch.

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bash (package)
bash (package)
Returns true if the validator is preactive.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
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Update name of the validator.
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Update description of the validator.
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bash (package)
Update image url of the validator.
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bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
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Update p2p address of this candidate validator
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bash (package)
Update primary address of this validator, taking effects from next epoch
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Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
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bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
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```bash
Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for testing.
```bash
```bash
```

Update network public key of this candidate validator

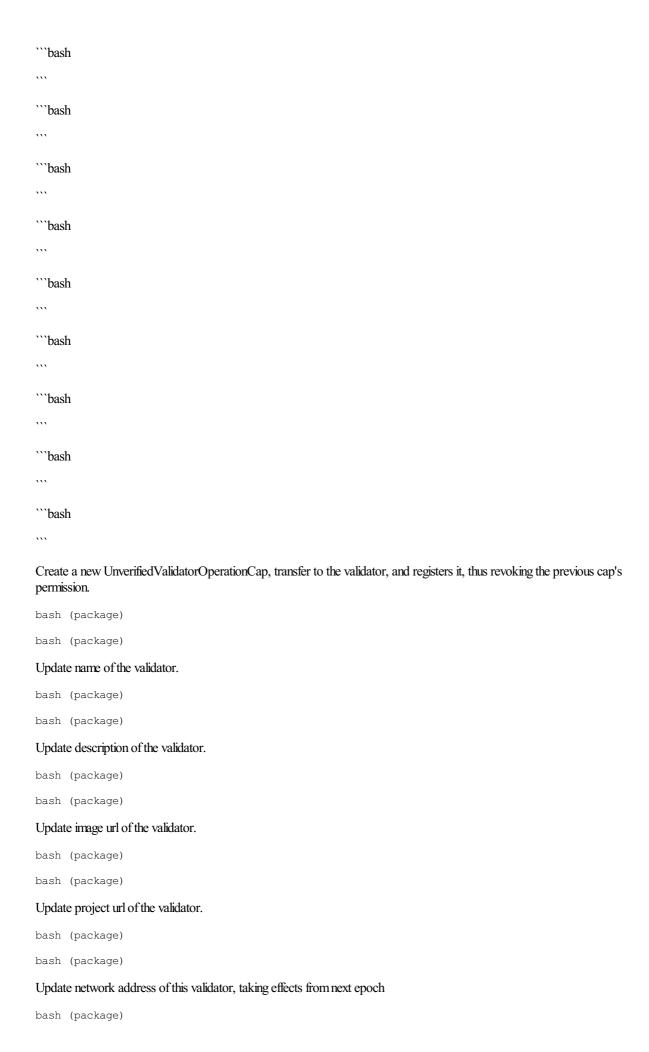
## **Function**

Returns true if the validator is preactive.	
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Return the total amount staked with this validator
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Set the voting power of this validator, called only from validator_set.
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Update network address of this candidate validator
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Update p2p address of this validator, taking effects from next epoch
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Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
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bash (package)
Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
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bash (package)

Update Narwhal worker public key of this candidate validator bash (package) bash (package) Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch. bash (package) bash (package) Helper macro which extracts the value from Some and applies \$f to it. ```bash ```bash Aborts if validator metadata is valid ```bash ```bash \*\*\* ```bash ```bash bash (package) bash (package) Create a new validator from the given ValidatorMetadata, called by both new and new\_for\_testing. ```bash \*\*\* ```bash **Function** ```bash ```bash

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Return the total amount staked with this validator	
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
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Update primary address of this validator, taking effects from next epoch

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bash (package)
bash (package)
Update primary address of this candidate validator
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bash (package)
Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
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Update Narwhal worker public key of this validator, taking effects from next epoch
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Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
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Update description of the validator.
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bash (package)
bash (package)
Update image url of the validator.
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Update project url of the validator.
bash (package)
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Update network address of this validator, taking effects from next epoch
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Update network address of this candidate validator
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Update p2p address of this validator, taking effects from next epoch
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Update p2p address of this candidate validator
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Update primary address of this validator, taking effects from next epoch
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Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
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Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
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bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
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Update network public key of this candidate validator
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bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new for testing.
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
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Update name of the validator.
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Update description of the validator.
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Update image url of the validator.
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Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
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Update network address of this candidate validator
bash (package)
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Update p2p address of this validator, taking effects from next epoch
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# Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator bash (package) bash (package) Update network public key of this validator, taking effects from next epoch bash (package) bash (package) Update network public key of this candidate validator bash (package) bash (package) Update Narwhal worker public key of this validator, taking effects from next epoch bash (package) bash (package) Update Narwhal worker public key of this candidate validator

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Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch.

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bash (package)
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Helper macro which extracts the value from Some and applies \$f to it.

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Aborts if validator metadata is valid
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bash (package)
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Update name of the validator.
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Update description of the validator.
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Update project url of the validator.
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bash (package)
Update network address of this validator, taking effects from next epoch
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Update network address of this candidate validator
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Update p2p address of this validator, taking effects from next epoch
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Update p2p address of this candidate validator
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Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
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Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
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Update network public key of this validator, taking effects from next epoch
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bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
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Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
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Update Narwhal worker public key of this validator, taking effects from next epoch

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Set the voting power of this validator, called only from validator_set.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
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Update name of the validator.
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Update protocol public key of this candidate validator

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Update protocol public key of this validator, taking effects from next epoch

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bash (package)
Update network public key of this validator, taking effects from next epoch
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Update network public key of this candidate validator
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Aborts if validator metadata is valid
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bash (package)
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Create a new validator from the given ValidatorMetadata, called by both new and new for testing.
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap

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Update protocol public key of this validator, taking effects from next epoch

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Update protocol public key of this candidate validator
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Update network public key of this validator, taking effects from next epoch
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Create a new validator from the given  $\underline{\text{ValidatorMetadata}}$ , called by both  $\underline{\text{new}}$  and  $\underline{\text{new}}$  for  $\underline{\text{testing}}$ .

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#### **Function**

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Set the voting power of this validator, called only from validator_set.
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Update name of the validator.

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bash (package)
Update description of the validator.
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bash (package)
Update network address of this candidate validator
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bash (package)
Update p2p address of this validator, taking effects from next epoch
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bash (package)
Update p2p address of this candidate validator
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Update primary address of this validator, taking effects from next epoch
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Update primary address of this candidate validator
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bash (package)
Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
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bash (package)
Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
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Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
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bash (package)
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Create a new validator from the given <u>ValidatorMetadata</u>, called by both <u>new</u> and new\_for\_testing. ```bash \*\*\* ```bash \*\*\* **Function** ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash

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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
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## Update image url of the validator. bash (package) bash (package) Update project url of the validator. bash (package) bash (package) Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator

Update network public key of this validator, taking effects from next epoch

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bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
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bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
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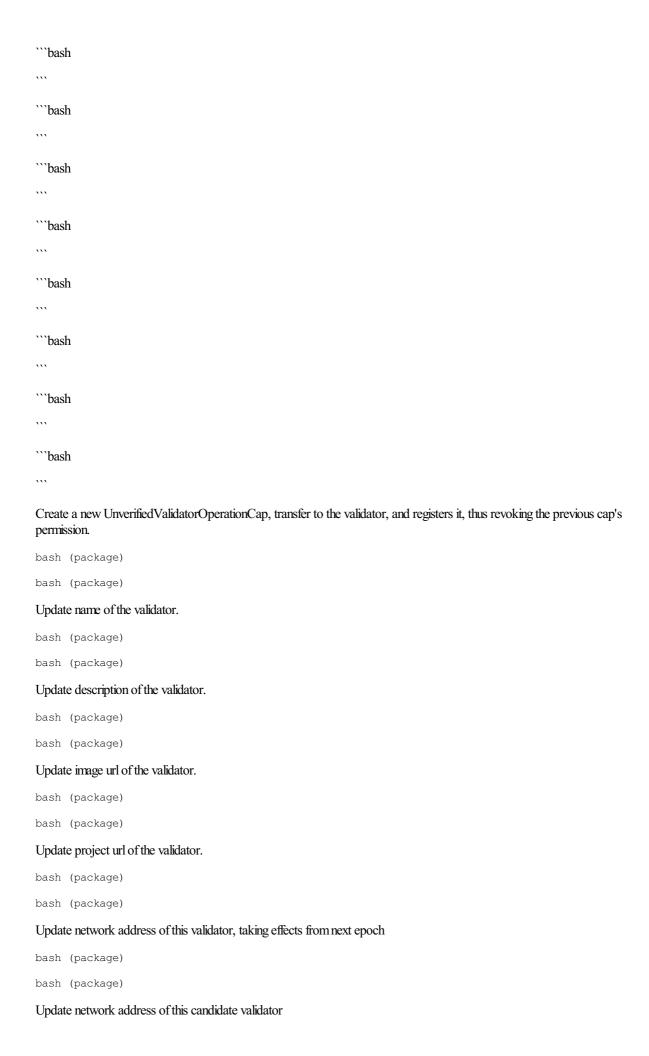
#### **Function**

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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
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bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
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Update primary address of this candidate validator
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Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
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bash (package)
Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
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bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
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Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
```

```
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when advancing an epoch.

bash (package)

bash (package)
```

Helper macro which extracts the value from Some and applies \$f to it.

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```bash

Aborts if validator metadata is valid

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""bash (package)

Create a new validator from the given  $\underline{\text{ValidatorMetadata}}$ , called by both  $\underline{\text{new}}$  and  $\underline{\text{new}}$  for  $\underline{\text{testing}}$ .

```bash ```

# **Function**

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| Return the total amount staked with this validator |  |
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| Return the voting power of this validator.         |  |
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| Set the voting power of this validator, called only from validator_set. |
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```
```bash
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
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Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
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Aborts if validator metadata is valid
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```bash
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bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
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Return the total amount staked with this validator
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Return the voting power of this validator.
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Set the voting power of this validator, called only from validator_set.
bash (package)
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bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
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bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
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bash (package)
Update primary address of this validator, taking effects from next epoch
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Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
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bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
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Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
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Aborts if validator metadata is valid
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bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
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Return the total amount staked with this validator	
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Return the voting power of this validator.	
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Set the voting power of this validator, called only from validator\_set. bash (package) bash (package) ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\*

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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.

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### Update name of the validator.

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bash (package)
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### Update description of the validator.

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### Update image url of the validator.

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# Update project url of the validator.

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### Update network address of this validator, taking effects from next epoch

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# Update network address of this candidate validator

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### Update p2p address of this validator, taking effects from next epoch

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bash (package)
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### Update p2p address of this candidate validator

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### Update primary address of this validator, taking effects from next epoch

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# Update primary address of this candidate validator

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bash (package)
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### Update worker address of this validator, taking effects from next epoch

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Update worker address of this candidate validator
bash (package)
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Update protocol public key of this validator, taking effects from next epoch
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Update network address of this candidate validator
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bash (package)
Update p2p address of this validator, taking effects from next epoch
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### Update p2p address of this candidate validator

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### Update primary address of this validator, taking effects from next epoch

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### Update primary address of this candidate validator

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### Update worker address of this candidate validator

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### Update protocol public key of this validator, taking effects from next epoch

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### Update protocol public key of this candidate validator

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bash (package)
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### Update network public key of this validator, taking effects from next epoch

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bash (package)
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### Update network public key of this candidate validator

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### Update Narwhal worker public key of this validator, taking effects from next epoch

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bash (package)
bash (package)
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### Update Narwhal worker public key of this candidate validator

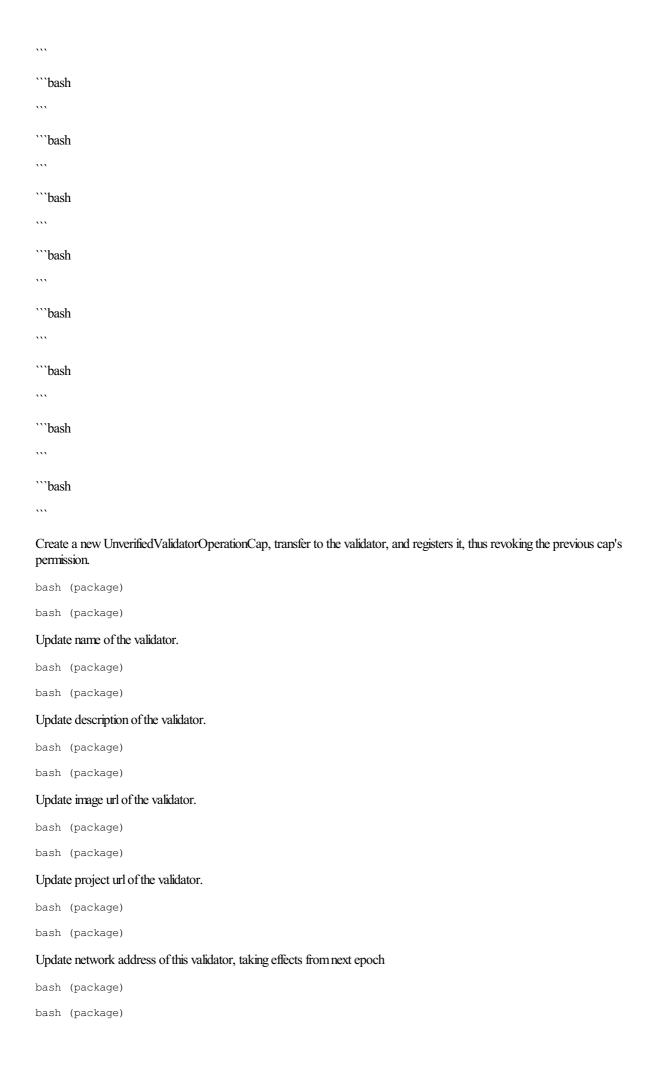
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bash (package)
bash (package)
```

# Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch.

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bash (package)
bash (package)
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```
Helper macro which extracts the value from Some and applies $f to it.
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# Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) bash (package)

Update primary address of this validator, taking effects from next epoch

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Update primary address of this candidate validator

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Update worker address of this validator, taking effects from next epoch

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Update worker address of this candidate validator

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Update protocol public key of this validator, taking effects from next epoch

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Update protocol public key of this candidate validator

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bash (package)
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Update network public key of this validator, taking effects from next epoch

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bash (package)
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Update network public key of this candidate validator

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bash (package)
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```

Update Narwhal worker public key of this validator, taking effects from next epoch

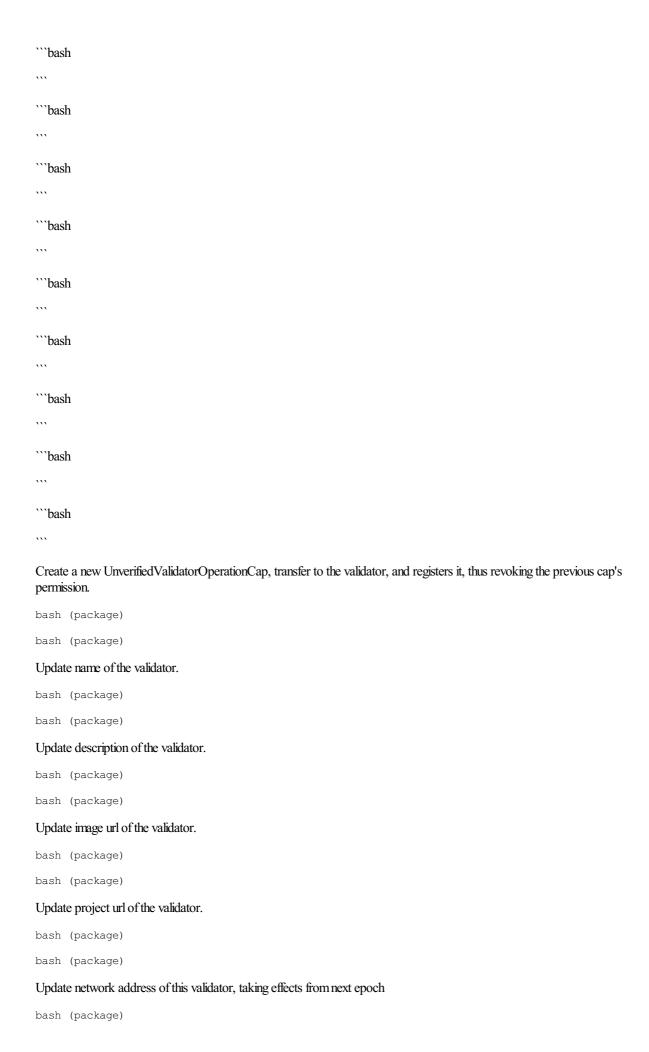
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Update Narwhal worker public key of this candidate validator

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bash (package)
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bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
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bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
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bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
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Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
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Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
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Update protocol public key of this candidate validator
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Update network public key of this validator, taking effects from next epoch
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Update network public key of this candidate validator
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Update Narwhal worker public key of this validator, taking effects from next epoch
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Update Narwhal worker public key of this candidate validator bash (package) bash (package) Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch. bash (package) bash (package) Helper macro which extracts the value from Some and applies \$f to it. ```bash ```bash Aborts if validator metadata is valid ```bash ```bash \*\*\* ```bash ```bash bash (package) bash (package) Create a new validator from the given ValidatorMetadata, called by both new and new\_for\_testing. ```bash \*\*\* ```bash **Function** ```bash ```bash

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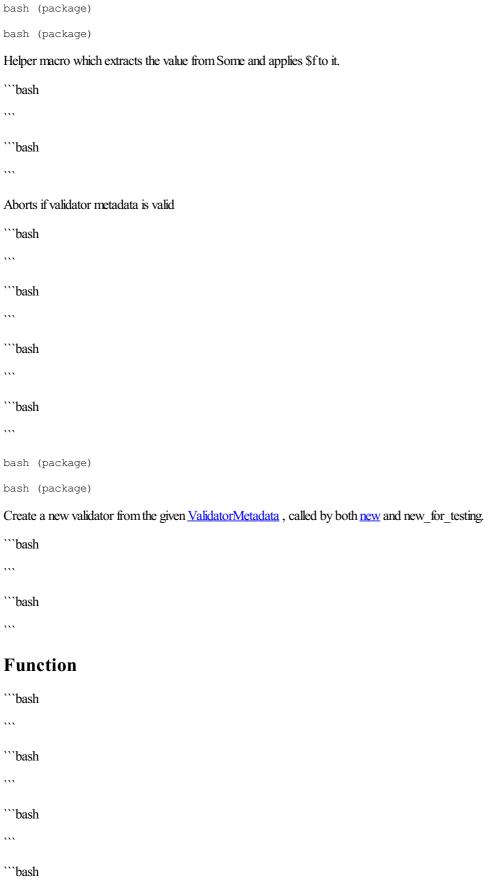
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bash (package)
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Update image url of the validator.
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bash (package)
Update project url of the validator.
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Update network address of this candidate validator
bash (package)
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bash (package)
Update p2p address of this validator, taking effects from next epoch
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bash (package)
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Update primary address of this candidate validator
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bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
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Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
```

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch.



```bash	
```bash	
Return the total amount staked with this validator	

```bash

```
```bash
***
Return the voting power of this validator.
```bash
***
```bash
***
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
```bash
***
```bash
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```bash
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```bash
```bash
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
```

```
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
```

Helper macro which extracts the value from Some and applies \$f to it.

bash (package)
bash (package)

<sup>```</sup>bash

```
```bash
***
Aborts if validator metadata is valid
```bash
***
```bash
```bash
***
```bash
***
bash (package)
bash (package)
Create a new validator from the given <u>ValidatorMetadata</u>, called by both <u>new</u> and new_for_testing.
```bash
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```bash
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Function
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Oasii
Return the total amount staked with this validator
```bash
W.
```bash
***
Return the voting power of this validator.
```bash
····
```bash
Set the voting power of this validator, called only from validator_set.

bash (package)	
```bash	
```bash	
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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.

```
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
```

Update worker address of this candidate validator

```
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
```bash
```bash
```

```
```bash
***
bash (package)
bash (package)
Create a new validator from the given <u>ValidatorMetadata</u>, called by both <u>new</u> and new_for_testing.
```bash
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Function
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```bash
***
Return the total amount staked with this validator
```bash
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```bash
***
Return the voting power of this validator.
```bash
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```bash
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
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```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
```

Update network address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
```

Update Narwhal worker public key of this validator, taking effects from next epoch

```
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
***
Aborts if validator metadata is valid
```bash
***
```bash
```bash
***
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
Function
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```bash
```bash
Return the total amount staked with this validator
```bash
```bash
Return the voting power of this validator.
```bash
```bash

Set the voting power of this validator, called only from validator\_set. bash (package) bash (package) ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash \*\*\* ```bash ```bash \*\*\*

```bash

```bash

\*\*\*

Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.

```
bash (package)
bash (package)
```

#### Update name of the validator.

```
bash (package)
bash (package)
```

#### Update description of the validator.

```
bash (package)
bash (package)
```

#### Update image url of the validator.

```
bash (package)
bash (package)
```

### Update project url of the validator.

```
bash (package)
bash (package)
```

#### Update network address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

# Update network address of this candidate validator

```
bash (package)
bash (package)
```

#### Update p2p address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update p2p address of this candidate validator

```
bash (package)
bash (package)
```

#### Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

# Update primary address of this candidate validator

```
bash (package)
bash (package)
```

#### Update worker address of this validator, taking effects from next epoch

```
bash (package)
```

```
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
```bash
```

```
```bash
***
```bash
***
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
***
```bash
***
Function
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```bash
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```

```
```bash
***
Return the total amount staked with this validator
```bash
***
```bash
***
Return the voting power of this validator.
```bash
***
```bash
***
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
```bash
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```bash
```bash
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
```

```
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
```

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch.

```
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
***
Aborts if validator metadata is valid
```bash
***
```bash
***
```bash
***
```bash
***
bash (package)
bash (package)
Create a new validator from the given \underline{ValidatorMetadata} , called by both \underline{new} and new\_for\_testing.
```bash
***
```bash
***
Function
```bash
***
```bash
```bash
***
```bash
```bash
***
```

```
```bash
***
```bash
***
```bash
***
```bash
```bash
***
Return the total amount staked with this validator
```bash
***
```bash
***
Return the voting power of this validator.
```bash
***
```bash
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
```bash
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```bash
***
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
```

```
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
```

```
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
```bash
***
```bash
```bash
...
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
```bash
,,,
Function
```bash
...
```

```
```bash
***
```bash
***
```bash
***
```bash
```bash
***
```bash
***
```bash
Return the total amount staked with this validator
```bash
```bash
Return the voting power of this validator.
```bash
***
```bash
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
```bash
```bash
```bash
***
```bash
```

```bash
···
```bash
```bash
···
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)

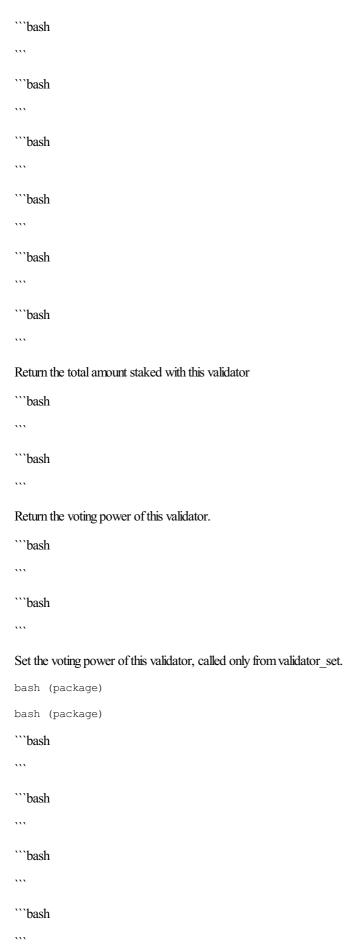
# Update image url of the validator. bash (package) bash (package) Update project url of the validator. bash (package) bash (package) Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator

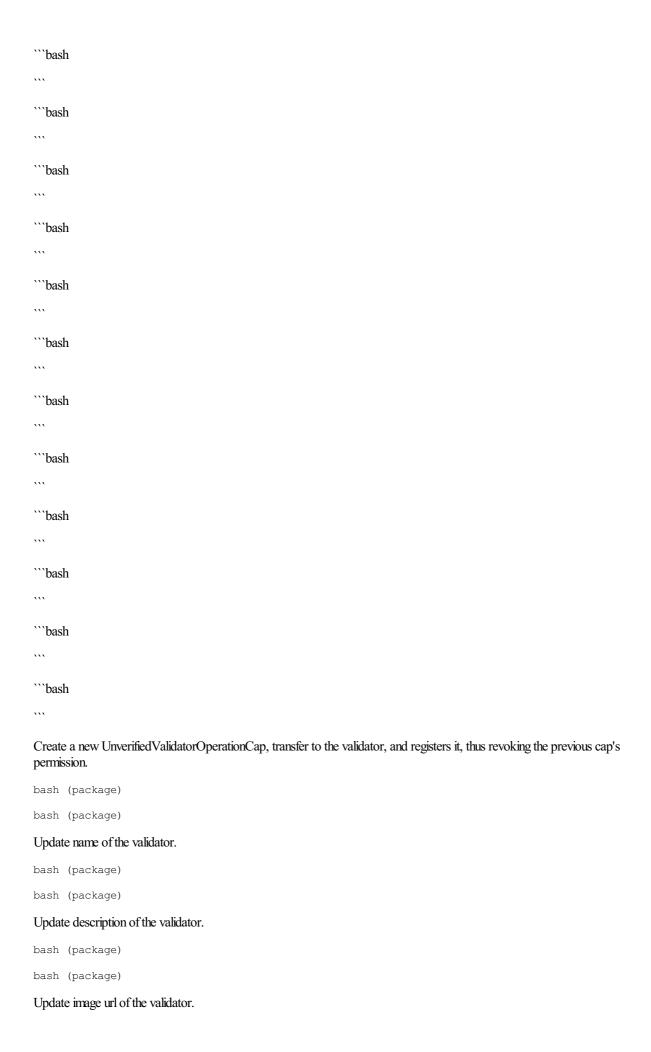
Update network public key of this validator, taking effects from next epoch

bash (package)
bash (package)

```
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
,,,
Aborts if validator metadata is valid
```bash
,,,
```bash
```bash
,,,
```bash
...
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
,,,
```bash
```

# **Function**



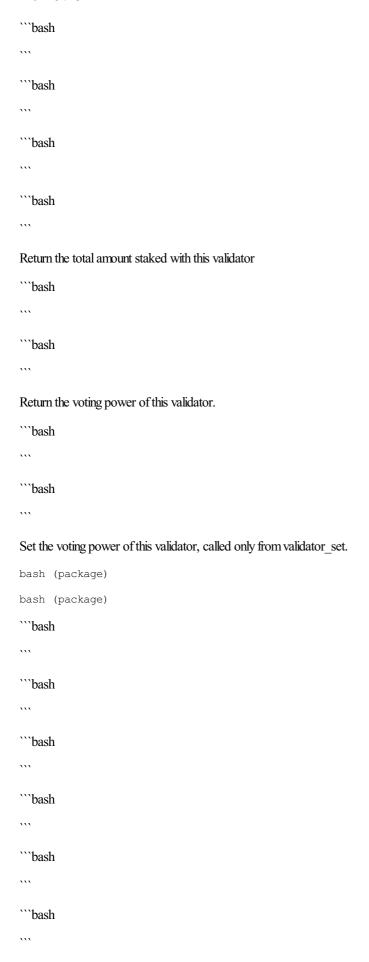


```
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
```

bash (package)

```
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
...
Aborts if validator metadata is valid
```bash
***
```bash
```bash
,,,
```bash
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
***
```bash
```

### **Function**



bash
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)

```
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
```

```
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
***
```bash
```bash
```bash
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for testing.
```bash
```bash
Function
```bash
```bash
```

Update Narwhal worker public key of this validator, taking effects from next epoch

```
Return the total amount staked with t
```

Return the total amount staked with this validator

```
"bash"
"bash"
```

Return the voting power of this validator.

```
```bash
```
```

Set the voting power of this validator, called only from validator\_set.

```
bash (package)
bash (package)
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```bash

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```bash
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
```

```
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
```

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch.

```
bash (package)
```

bash (package)
bash (package)

Update Narwhal worker public key of this candidate validator

```
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
***
```bash
```bash
***
```bash
***
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
***
```bash
Function
Return the total amount staked with this validator
```bash
***
```bash
Return the voting power of this validator.
```bash
```bash
```

Set the voting power of this validator, called only from validator\_set.

bash (package)	
bash (package)	
```bash	
```bash	

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Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.

```
bash (package)
bash (package)
```

#### Update name of the validator.

```
bash (package)
bash (package)
```

#### Update description of the validator.

```
bash (package)
bash (package)
```

#### Update image url of the validator.

```
bash (package)
bash (package)
```

#### Update project url of the validator.

```
bash (package)
bash (package)
```

#### Update network address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update network address of this candidate validator

```
bash (package)
bash (package)
```

#### Update p2p address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update p2p address of this candidate validator

```
bash (package)
bash (package)
```

#### Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update primary address of this candidate validator

```
bash (package)
bash (package)
```

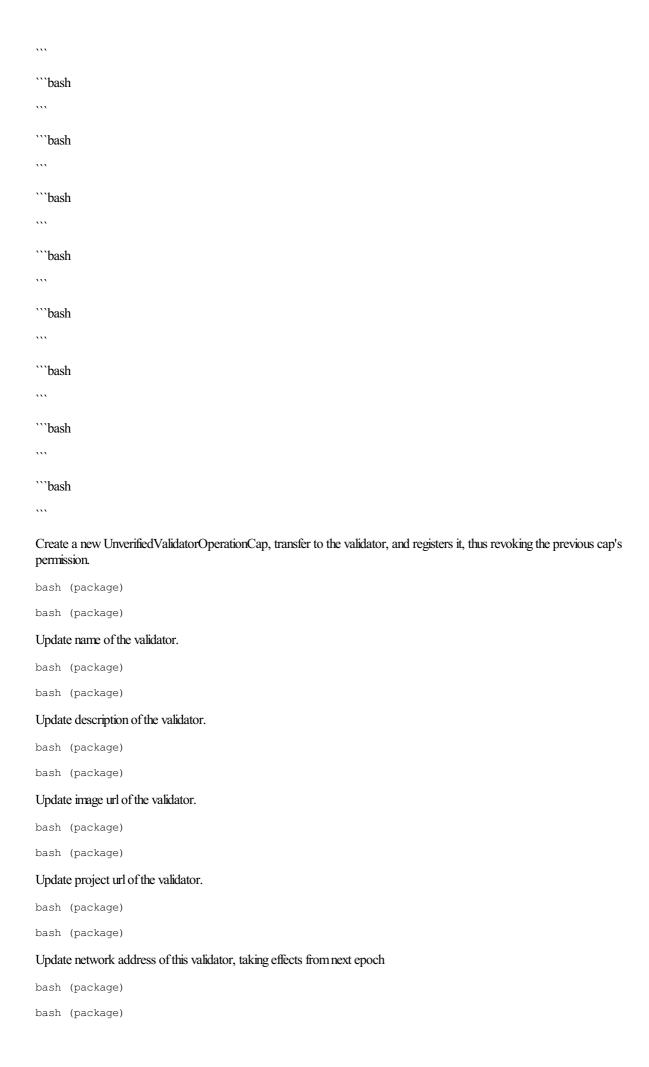
#### Update worker address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

```
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
```bash
```bash
```

Update worker address of this candidate validator

```
```bash
***
bash (package)
bash (package)
Create a new validator from the given <u>ValidatorMetadata</u>, called by both <u>new</u> and new_for_testing.
```bash
***
```bash
***
Function
Return the voting power of this validator.
```bash
```bash
***
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
```bash
```bash
***
```bash
```bash
***
```bash
```bash
***
```bash
```bash
```



# Update network address of this candidate validator bash (package) bash (package)

#### Update p2p address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update p2p address of this candidate validator

```
bash (package)
bash (package)
```

#### Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update primary address of this candidate validator

```
bash (package)
bash (package)
```

#### Update worker address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update worker address of this candidate validator

```
bash (package)
bash (package)
```

#### Update protocol public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update protocol public key of this candidate validator

```
bash (package)
bash (package)
```

#### Update network public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update network public key of this candidate validator

```
bash (package)
bash (package)
```

#### Update Narwhal worker public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update Narwhal worker public key of this candidate validator

```
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
```bash
***
```bash
```bash
...
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
Function
Set the voting power of this validator, called only from validator_set.
bash (package)
bash (package)
```bash
```bash
```

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```bash
```bash
***
```bash
····
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)

## Update description of the validator. bash (package) bash (package) Update image url of the validator. bash (package) bash (package) Update project url of the validator. bash (package) bash (package) Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package)

Update protocol public key of this candidate validator

bash (package)
bash (package)

Update protocol public key of this validator, taking effects from next epoch

```
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
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```bash
Aborts if validator metadata is valid
```bash
***
```bash
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```bash
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new for testing.
```bash
```

bash (package)

```
***
```bash
***
Function
```bash
***
```bash
```bash
***
```bash
***
```bash
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```bash
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```bash
```

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```bash

```bash

```
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
```

Update worker address of this validator, taking effects from next epoch

```
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
...
```bash
Aborts if validator metadata is valid
```bash
```bash
```

bash (package)

```
```bash
***
```bash
***
bash (package)
bash (package)
Create a new validator from the given <u>ValidatorMetadata</u>, called by both <u>new</u> and new_for_testing.
```bash
***
```bash
***
Function
```bash
```bash
***
```bash
***
```bash
```bash
***
```bash
```bash
***
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***
```bash
```bash
***
```bash
```

```
```bash
```bash
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
```

Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
```

```
Aborts if validator metadata is valid
```bash
***
```bash
***
```bash
***
```bash
***
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
```bash
***
Function
```bash
***
```bash
```

```
```bash
...
```bash
```bash
,,,
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
```

## Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator bash (package) bash (package) Update network public key of this validator, taking effects from next epoch bash (package) bash (package) Update network public key of this candidate validator bash (package) bash (package) Update Narwhal worker public key of this validator, taking effects from next epoch bash (package) bash (package) Update Narwhal worker public key of this candidate validator bash (package)

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when

bash (package)

advancing an epoch.

bash (package)
bash (package)

```bash

Helper macro which extracts the value from Some and applies \$f to it.

```
```bash
***
Aborts if validator metadata is valid
```bash
***
```bash
***
```bash
***
```bash
***
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for testing.
```bash
***
```bash
Function
```bash
```bash
***
```bash
***
```bash
***
```bash
***
```bash
```bash
***
```bash
```

```
```bash
...
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
```

Update primary address of this candidate validator

```
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```

```bash

```
```bash
***
```bash
```bash
***
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
***
```bash
***
Function
```bash
***
```bash
***
```bash
```bash
***
```bash
```bash
```bash
***
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
```

permission.

bash (package)

```
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
```

```
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
,,,
```bash
Aborts if validator metadata is valid
```bash
```bash
```bash
```bash
```

Update protocol public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
***
Function
```bash
***
```bash
```bash
```bash
***
```bash
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
```

```
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
```

```
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
***
```bash
```bash
```bash
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
```bash
Function
```bash
```bash
```

Update Narwhal worker public key of this validator, taking effects from next epoch

```
```bash
...
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
```

Update primary address of this candidate validator

```
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```

```bash

```
```bash
,,,
```bash
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
***
```bash
Macro function
```bash
***
```bash
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
bash (package)
bash (package)
Update name of the validator.
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
```

## Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch bash (package) bash (package) Update p2p address of this candidate validator bash (package) bash (package) Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator bash (package) bash (package) Update network public key of this validator, taking effects from next epoch bash (package) bash (package)

Update Narwhal worker public key of this validator, taking effects from next epoch

Update network public key of this candidate validator

bash (package)
bash (package)

```
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies f to it.
```bash
```bash
***
Aborts if validator metadata is valid
```bash
***
```bash
```bash
...
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
Function
Create a new UnverifiedValidatorOperationCap, transfer to the validator, and registers it, thus revoking the previous cap's
permission.
```

bash (package)
bash (package)

Update name of the validator.

```
bash (package)
bash (package)
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
```

```
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
```bash
***
```bash
```bash
...
bash (package)
bash (package)
```

Create a new validator from the given ValidatorMetadata, called by both new and new\_for\_testing. ```bash ```bash **Function** Update name of the validator. bash (package) bash (package) Update description of the validator. bash (package) bash (package) Update image url of the validator. bash (package) bash (package) Update project url of the validator. bash (package) bash (package) Update network address of this validator, taking effects from next epoch bash (package) bash (package) Update network address of this candidate validator bash (package) bash (package) Update p2p address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

## Update p2p address of this candidate validator

```
bash (package)
bash (package)
```

### Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

### Update primary address of this candidate validator

```
bash (package)
bash (package)
```

```
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
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bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
,,,
Aborts if validator metadata is valid
```bash
...
```

```
```bash
```bash
```bash
...
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
***
```bash
,,,
Function
Update description of the validator.
bash (package)
bash (package)
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
```

# Update primary address of this validator, taking effects from next epoch bash (package) bash (package) Update primary address of this candidate validator bash (package) bash (package) Update worker address of this validator, taking effects from next epoch bash (package) bash (package) Update worker address of this candidate validator bash (package) bash (package) Update protocol public key of this validator, taking effects from next epoch bash (package) bash (package) Update protocol public key of this candidate validator bash (package) bash (package) Update network public key of this validator, taking effects from next epoch bash (package) bash (package) Update network public key of this candidate validator bash (package) bash (package) Update Narwhal worker public key of this validator, taking effects from next epoch bash (package) bash (package) Update Narwhal worker public key of this candidate validator bash (package)

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when

bash (package)

advancing an epoch.

bash (package)
bash (package)

```bash

Helper macro which extracts the value from Some and applies \$f to it.

```
```bash
,,,
Aborts if validator metadata is valid
```bash
```bash
...
```bash
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new for testing.
```bash
```bash
Function
Update image url of the validator.
bash (package)
bash (package)
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
```

Update p2p address of this candidate validator

```
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
bash (package)
bash (package)
```

Helper macro which extracts the value from Some and applies \$f to it.

```
```bash
,,,
```bash
Aborts if validator metadata is valid
```bash
```bash
```bash
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
Function
Update project url of the validator.
bash (package)
bash (package)
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
```

```
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
```

Helper macro which extracts the value from Some and applies \$f to it.

bash (package)
bash (package)

<sup>```</sup>bash

```
```bash
...
Aborts if validator metadata is valid
```bash
...
```bash
```bash
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
...
```bash
***
Function
Update network address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
```

```
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
...
```bash
Aborts if validator metadata is valid
```

Update primary address of this candidate validator

```
```bash
```bash
```bash
...
```bash
bash (package)
bash (package)
Create a new validator from the given Validator Metadata, called by both new and new for testing.
```bash
***
```bash
,,,
Function
Update network address of this candidate validator
bash (package)
bash (package)
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
```

Update worker address of this candidate validator

```
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```bash
```bash
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```

```
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
Function
Update p2p address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update p2p address of this candidate validator
bash (package)
bash (package)
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
```

```
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
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bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
...
Aborts if validator metadata is valid
```bash
***
```bash
```bash
,,,
```bash
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
***
```bash
```

## **Function**

#### Update p2p address of this candidate validator

```
bash (package)
bash (package)
```

## Update primary address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update primary address of this candidate validator

```
bash (package)
bash (package)
```

## Update worker address of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update worker address of this candidate validator

```
bash (package)
bash (package)
```

## Update protocol public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update protocol public key of this candidate validator

```
bash (package)
bash (package)
```

#### Update network public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

## Update network public key of this candidate validator

```
bash (package)
bash (package)
```

#### Update Narwhal worker public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

#### Update Narwhal worker public key of this candidate validator

```
bash (package)
bash (package)
```

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch.

```
bash (package)
```

```
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
...
```bash
Aborts if validator metadata is valid
```bash
***
```bash
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***
```bash
***
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
...
```bash
Function
Update primary address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
```

```
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
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bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
,,,
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Aborts if validator metadata is valid
```bash
```bash
```bash
```bash
```

Update protocol public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
Create a new validator from the given Validator Metadata, called by both new and new for testing.
```bash
```bash
Function
Update primary address of this candidate validator
bash (package)
bash (package)
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
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Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
```

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when

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advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
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```bash
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```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new_for_testing.
```bash
```bash
Function
Update worker address of this validator, taking effects from next epoch
bash (package)
bash (package)
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
```

Update protocol public key of this candidate validator

```
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
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bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
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,,,
```bash
Aborts if validator metadata is valid
```bash
***
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٠,,
```bash
```bash
bash (package)
bash (package)
Create a new validator from the given ValidatorMetadata, called by both new and new for testing.
```bash
```

```
```bash
Function
Update worker address of this candidate validator
bash (package)
bash (package)
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator set when
advancing an epoch.
bash (package)
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
```bash
Aborts if validator metadata is valid
```

```bash

```
```bash
...
```bash
```bash
bash (package)
bash (package)
Create a new validator from the given Validator Metadata, called by both new and new for testing.
```bash
```bash
Function
Update protocol public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update Narwhal worker public key of this candidate validator
bash (package)
bash (package)
Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator_set when
```

advancing an epoch.

```
bash (package)
Helper macro which extracts the value from Some and applies $f to it.
```bash
...
```bash
Aborts if validator metadata is valid
```bash
***
```bash
```bash
***
```bash
***
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for \underline{\text{testing}}.
```bash
***
```bash
Function
Update protocol public key of this candidate validator
bash (package)
bash (package)
Update network public key of this validator, taking effects from next epoch
bash (package)
bash (package)
Update network public key of this candidate validator
bash (package)
bash (package)
Update Narwhal worker public key of this validator, taking effects from next epoch
bash (package)
bash (package)
```

Update Narwhal worker public key of this candidate validator bash (package) bash (package) Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch. bash (package) bash (package) Helper macro which extracts the value from Some and applies \$f to it. ```bash \*\*\* ```bash Aborts if validator metadata is valid ```bash ```bash ```bash ```bash bash (package) bash (package) Create a new validator from the given Validator Metadata, called by both new and new for testing. ```bash ```bash **Function** Update network public key of this validator, taking effects from next epoch

```
bash (package)
bash (package)
```

Update network public key of this candidate validator

```
bash (package)
bash (package)
```

Update Narwhal worker public key of this validator, taking effects from next epoch bash (package) bash (package) Update Narwhal worker public key of this candidate validator bash (package) bash (package) Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch. bash (package) bash (package) Helper macro which extracts the value from Some and applies \$f to it. ```bash ,,, ```bash Aborts if validator metadata is valid ```bash \*\*\* ```bash ```bash ```bash bash (package) bash (package) Create a new validator from the given  $\underline{\text{ValidatorMetadata}}$ , called by both  $\underline{\text{new}}$  and  $\underline{\text{new}}$  and  $\underline{\text{new}}$  for  $\underline{\text{testing}}$ , ```bash ```bash **Function** Update network public key of this candidate validator bash (package)

Update Narwhal worker public key of this validator, taking effects from next epoch bash (package) bash (package) Update Narwhal worker public key of this candidate validator bash (package) bash (package) Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch. bash (package) bash (package) Helper macro which extracts the value from Some and applies \$f to it. ```bash ,,, ```bash Aborts if validator metadata is valid ```bash \*\*\* ```bash ```bash ```bash bash (package) bash (package) Create a new validator from the given ValidatorMetadata, called by both new and new\_for\_testing. ```bash ```bash **Function** Update Narwhal worker public key of this validator, taking effects from next epoch

bash (package)
bash (package)

Update Narwhal worker public key of this candidate validator

```
bash (package)
bash (package)
```

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch.

```
bash (package)
bash (package)
```

Helper macro which extracts the value from Some and applies \$f to it.

```
""bash
""bash
""
```

Aborts if validator metadata is valid

```
""bash
""bash
""bash
""bash
""bash
""bash
""bash (package)
```

Create a new validator from the given Validator Metadata, called by both new and new for testing.

```
```bash
```

## **Function**

Update Narwhal worker public key of this candidate validator

```
bash (package)
bash (package)
```

Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch.

```
bash (package)
bash (package)
```

Helper macro which extracts the value from Some and applies \$f to it. ```bash \*\*\* ```bash Aborts if validator metadata is valid ```bash ```bash ```bash ... ```bash bash (package) bash (package) Create a new validator from the given ValidatorMetadata, called by both new and new for testing. ```bash \*\*\* ```bash **Function** Effectutate all staged next epoch metadata for this validator. NOTE: this function SHOULD ONLY be called by validator\_set when advancing an epoch. bash (package) bash (package) Helper macro which extracts the value from Some and applies \$f to it. ```bash \*\*\* ```bash Aborts if validator metadata is valid ```bash

```
```bash
***
```bash
```bash
***
bash (package)
bash (package)
Create a new validator from the given \underline{\text{ValidatorMetadata}}, called by both \underline{\text{new}} and \underline{\text{new}} for testing.
```bash
***
```bash
***
Macro function
Helper macro which extracts the value from Some and applies $f to it.
```bash
***
```bash
Aborts if validator metadata is valid
```bash
***
```bash
```bash
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***
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## **Function**

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Function
bash (package)
bash (package)
```

Create a new validator from the given <u>ValidatorMetadata</u>, called by both <u>new</u> and new\_for\_testing.

```bash			
***			
```bash			
***			

## **Function**

Create a new validator from the given  $\underline{\text{ValidatorMetadata}}$ , called by both  $\underline{\text{new}}$  and  $\underline{\text{new}}$  for  $\underline{\text{testing}}$ .

```
```bash
```bash
```