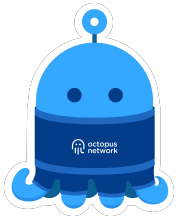
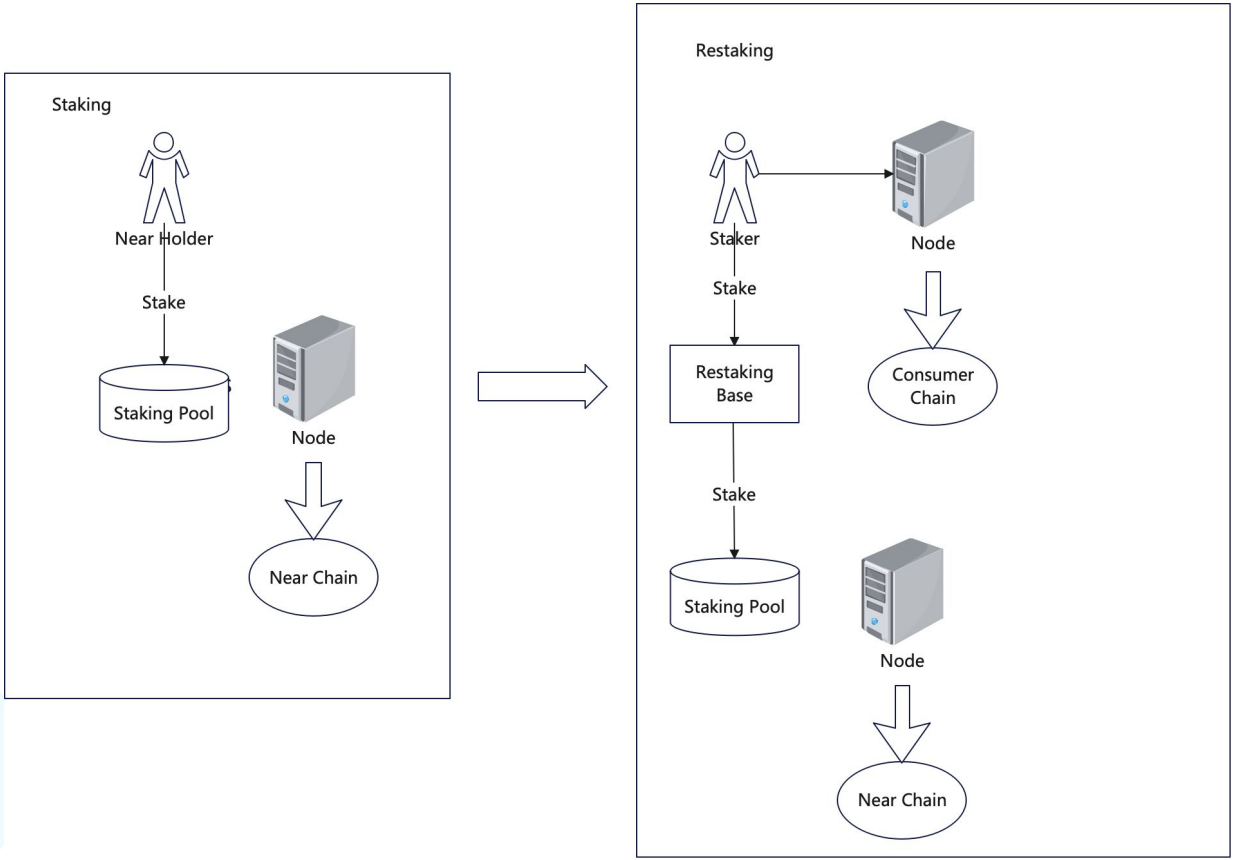
octopus network

Octopus Network 2.0 Restaking

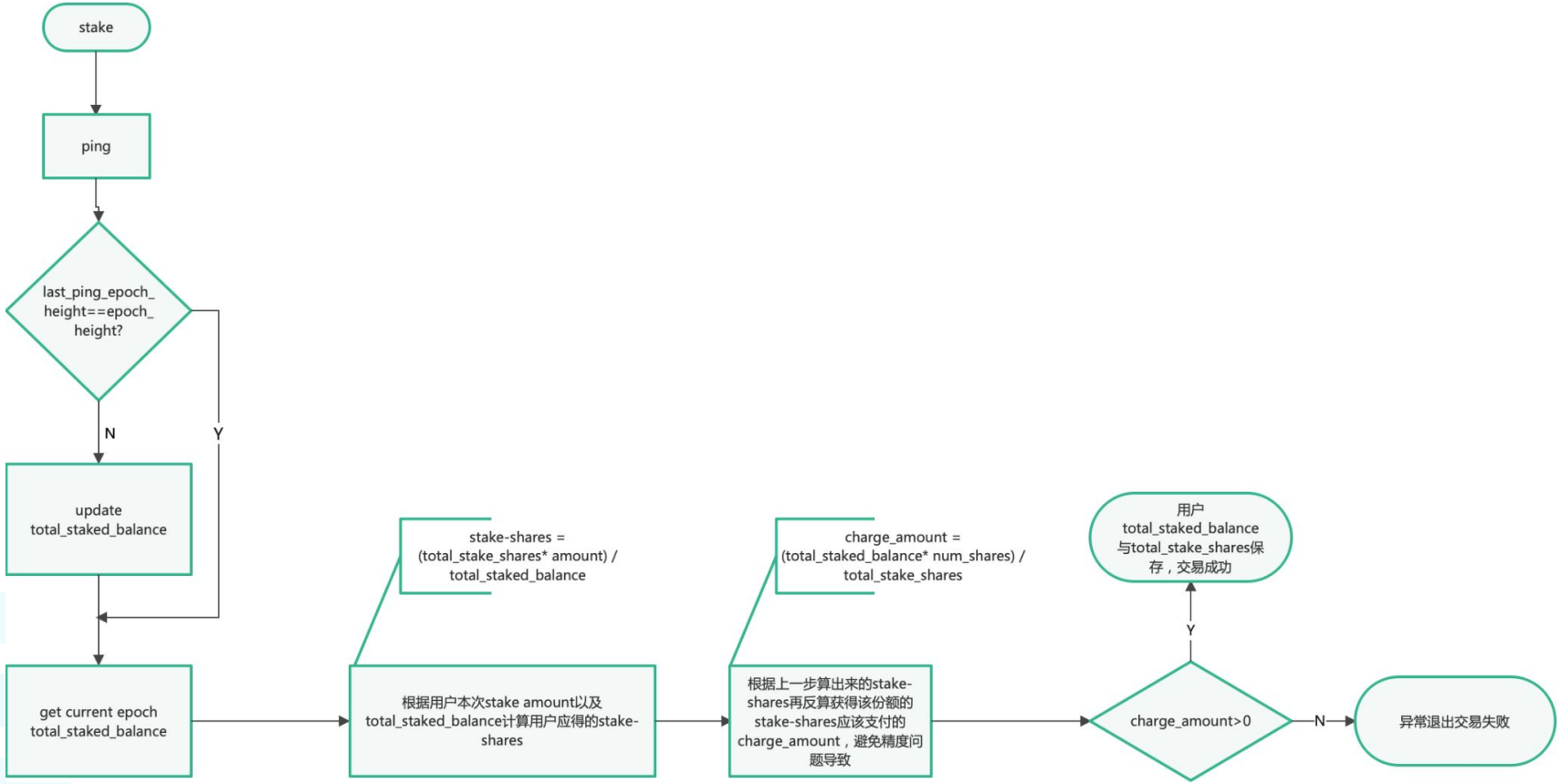
@Bob



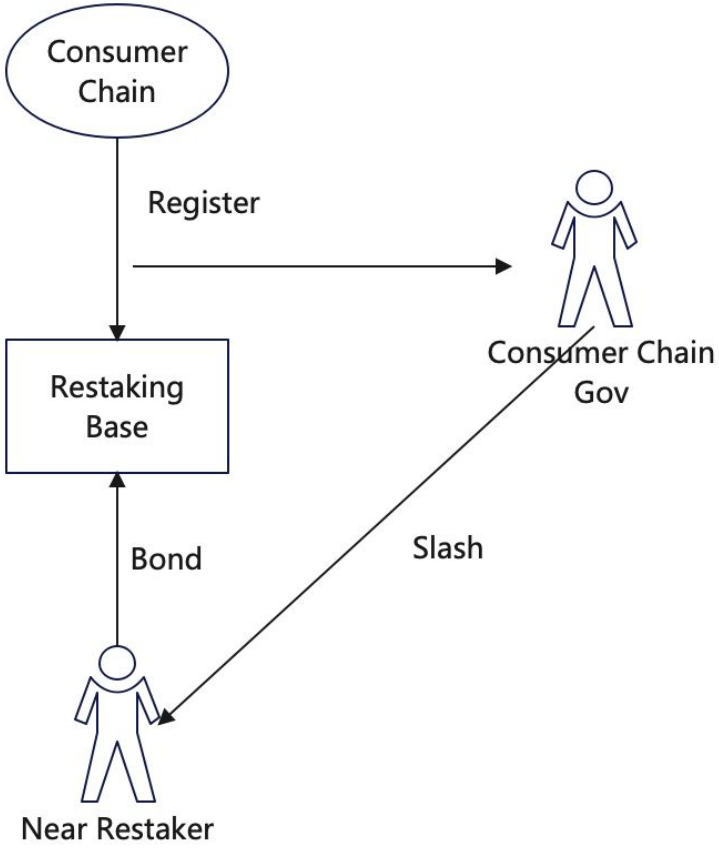
What is Restaking



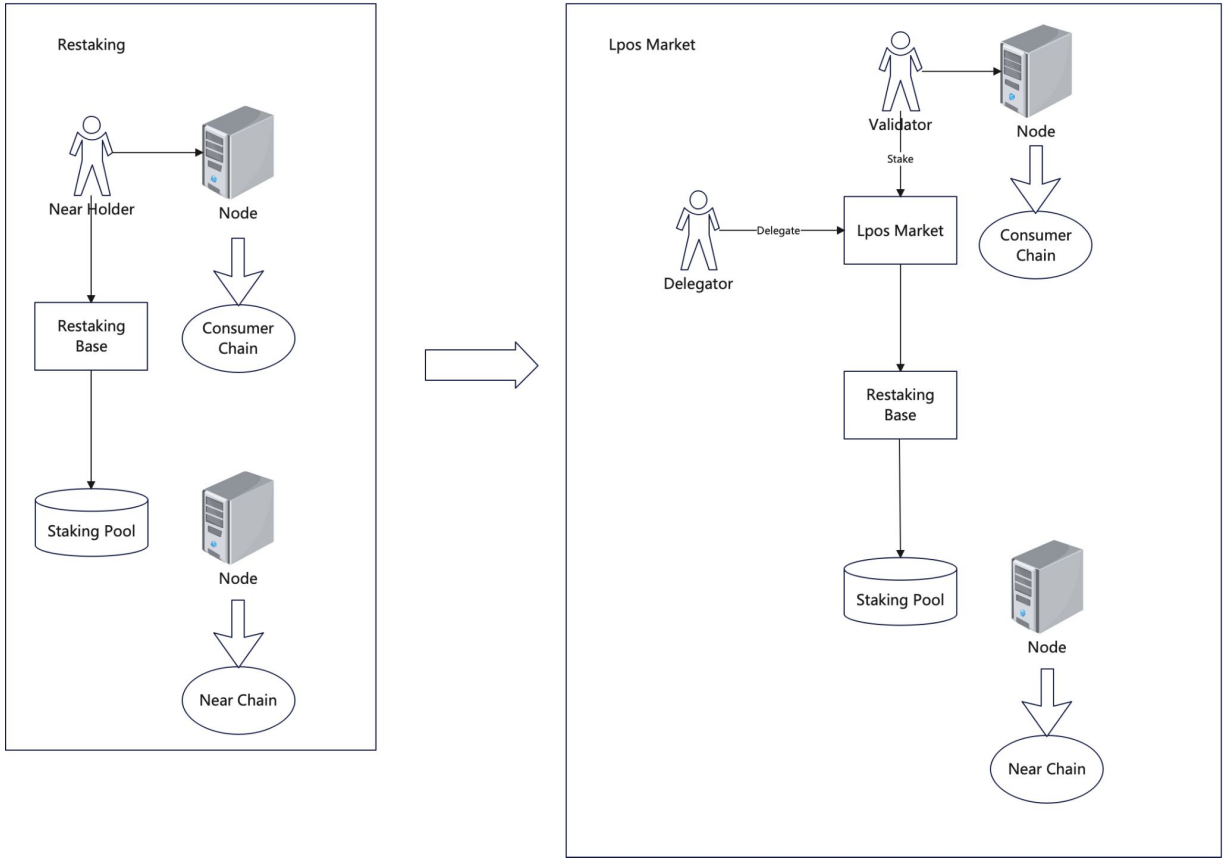
Share Balance



Consumer Chain & Bond & Slash



Lpos Market

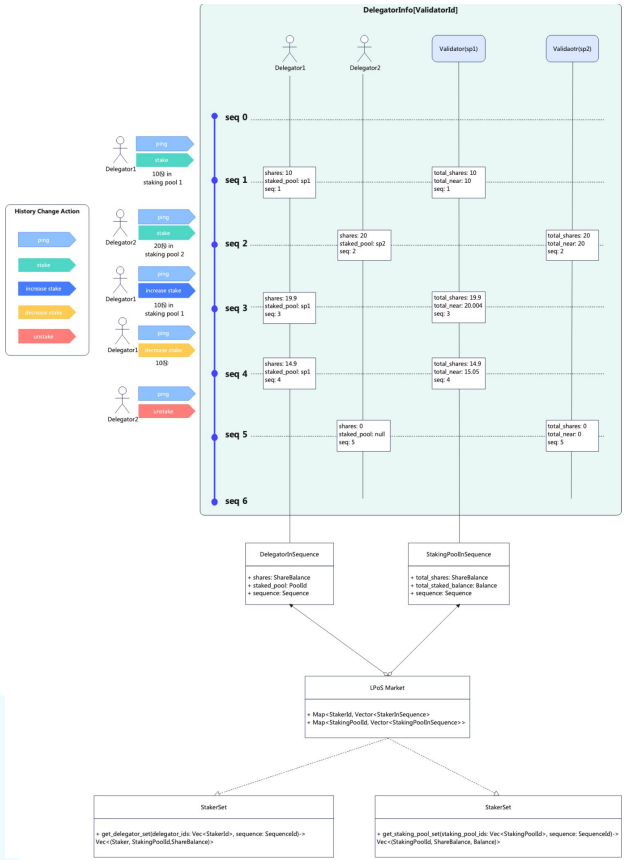

Restaking
Near Holder
Node
Restaking Base
Consumer Chain
Staking Pool
Node
Near Chain
Lpos Market
Validator
Node
Stake
Delegate
Lpos Market
Consumer Chain
Delegator
Restaking Base
Staking Pool
Node
Near Chain

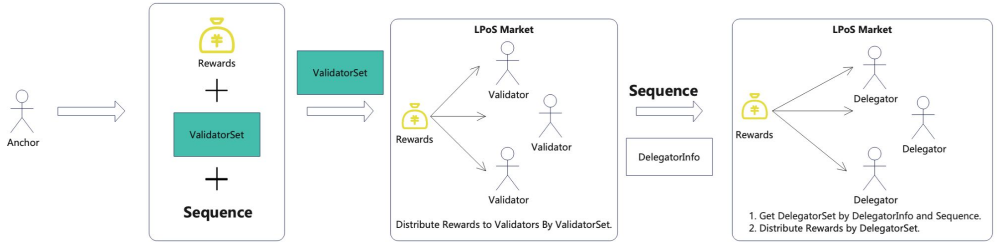
Validator And Delegator

- Validator 需要部署节点
- Validator 有权利选择Staking Pool，以及Bond和Unbond某条Consumer Chain
- Validator 和 Delegator的记账也是用Share Balance
- Validator和Delegator有各自最低质押限额
- Validator 会从Delegator收取手续费。并且为了提高去中心化性, Octopus 提出了一种动态的手续费的计算规则：
    - 所有Validator里质押量最大的Validator手续费是20%，然后其他Validator每比最大质押量少1%，手续费也相应会降1%。

    fee rate = 20 * N/M (假设某验证人质押量是N, 最大是M)

Sequence And Reward





其他-链下索引

- 建立良好的Event系统，以方便链下索引。

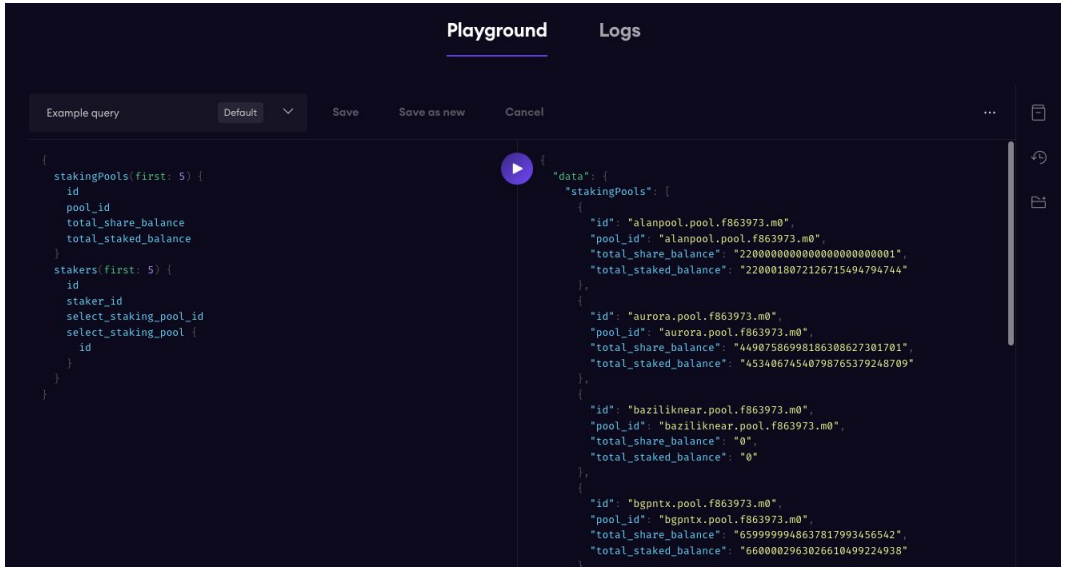
https://thegraph.com/hosted-service/subgraph/hsxyl/lpos-market-testnet

```rust
pub const EVENT_STANDARD: &str = "lpos-market";
pub const EVENT_STANDARD_VERSION: &str = "1.0.0";

#[derive(Serialize)]
#[serde(
    crate = "near_sdk::serde",
    rename_all = "snake_case",
    tag = "event",
    content = "data"
)]
#[must_use = "Don't forget to `.emit()` this event"]
2 implementations
pub enum Event<'a> {
    Ping {
        validator_id: &'a AccountId,
        new_total_staked_balance: &'a U128,
    },

    Deploy {
        validator_info: &'a ValidatorInfo,
        escrow_id: &'a AccountId,
        deploy_fee: &'a U128,
    },

    Stake {
        validator_info: &'a ValidatorInfo,
        select_pool_id: &'a PoolId,
        stake_amount: &'a U128,
        increase_shares: &'a U128,
    },
```



其他-Gas

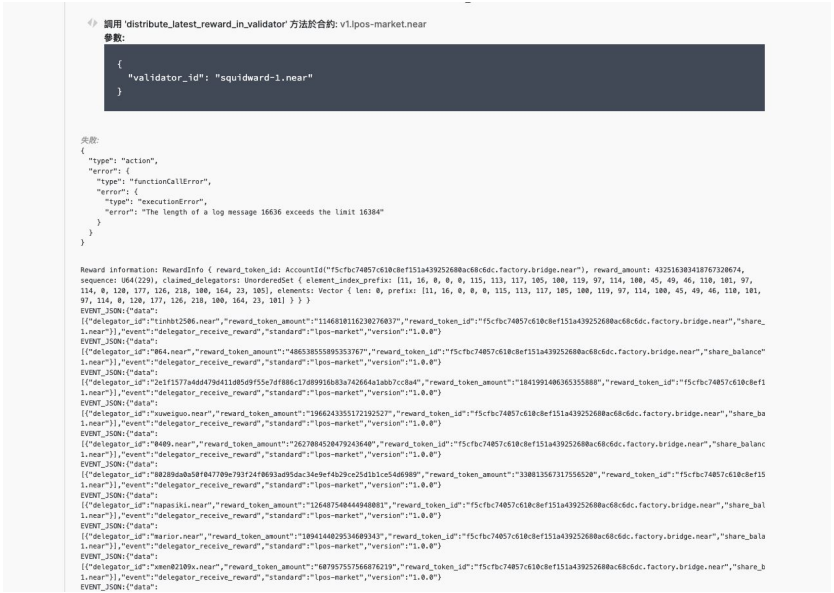
- 在涉及到复杂的跨合约调用需要小心地调整gas，并且需要理解Near SDK默认分配Gas的行为。

```
ext_escrow::ext(validator.escrow_id)
    .with_attached_deposit(RESTAKING_BASE_STORAGE_FEE)
    .with_static_gas(Gas::ONE_TERA.mul(TGAS_FOR_DECREASE_STAKE))
    .with_unused_gas_weight(0)
    .decrease_stake(near_balance.into(), Some(delegator_id.clone()))
    .then(
        Self::ext(env::current_account_id())
            .with_static_gas(Gas::ONE_TERA.mul(TGAS_FOR_DECREASE_STAKE_CALL_BACK))
            .undelegate_callback(
                delegator_id.clone(),
                validator.validator_id,
                decrease_shares.into(),
                near_balance.into(),
            ),
    );
```

其他-Log 上限

- Near一笔交易的log长度有上限，需要控制log大小。

https://legacy.explorer.near.org/transactions/D9DFSoYwJF4W26AY2upgHavuwBjb7Kd28hqBCbwvbi9b



調用 'distribute_latest_reward_in_validator' 方法於合約: v1.lpos-market.near

參數:

```
{
  "validator_id": "squidward-1.near"
}
```

失敗:

```
{
  "type": "action",
  "error": {
    "type": "functionCallError",
    "error": {
      "type": "executionError",
      "error": "The length of a log message 16636 exceeds the limit 16384"
    }
  }
}
```

Reward information: RewardInfo { reward_token_id: AccountId("f5cfbc74057c610c8ef151a439252680ac68c6dc.factory.bridge.near"), reward_amount: 432516303418767320674, sequence: U64(229), claimed_delegators: UnorderedSet { element_index_prefix: [11, 16, 0, 0, 0, 115, 113, 117, 105, 100, 119, 97, 114, 100, 45, 49, 46, 110, 101, 97, 114, 0, 120, 177, 126, 218, 100, 164, 23, 105], elements: Vector { len: 0, prefix: [11, 16, 0, 0, 0, 115, 113, 117, 105, 100, 119, 97, 114, 100, 45, 49, 46, 110, 101, 97, 114, 0, 120, 177, 126, 218, 100, 164, 23, 101] } } }

EVENT_JSON:{"data":[{"delegator_id":"tinhbt2506.near","reward_token_amount":"1146810116230276037","reward_token_id":"f5cfbc74057c610c8ef151a439252680ac68c6dc.factory.bridge.near","share_1.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

EVENT_JSON:{"data":[{"delegator_id":"064.near","reward_token_amount":"4865385555895353767","reward_token_id":"f5cfbc74057c610c8ef151a439252680ac68c6dc.factory.bridge.near","share_balance"1.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

EVENT_JSON:{"data":[{"delegator_id":"2e1f1577a4dd479d411d05d9f55e7df886c17d89916b83a742664a1abb7cc8a4","reward_token_amount":"184199140636535588","reward_token_id":"f5cfbc74057c610c8ef11.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

EVENT_JSON:{"data":[{"delegator_id":"xuweiguo.near","reward_token_amount":"196624335517219252?","reward_token_id":"f5cfbc74057c610c8ef151a439252680ac68c6dc.factory.bridge.near","share_ba1.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

EVENT_JSON:{"data":[{"delegator_id":"0409.near","reward_token_amount":"2627084520479243640","reward_token_id":"f5cfbc74057c610c8ef151a439252680ac68c6dc.factory.bridge.near","share_balanc1.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

EVENT_JSON:{"data":[{"delegator_id":"80289da0a50f047709e793f24f0693ad95dac34e9ef4b29ce25d1b1ce54d6989","reward_token_amount":"3308135673175565?0","reward_token_id":"f5cfbc74057c610c8ef151.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

EVENT_JSON:{"data":[{"delegator_id":"napasiki.near","reward_token_amount":"1264875404449480?1","reward_token_id":"f5cfbc74057c610c8ef151a439252680ac68c6dc.factory.bridge.near","share_bal1.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

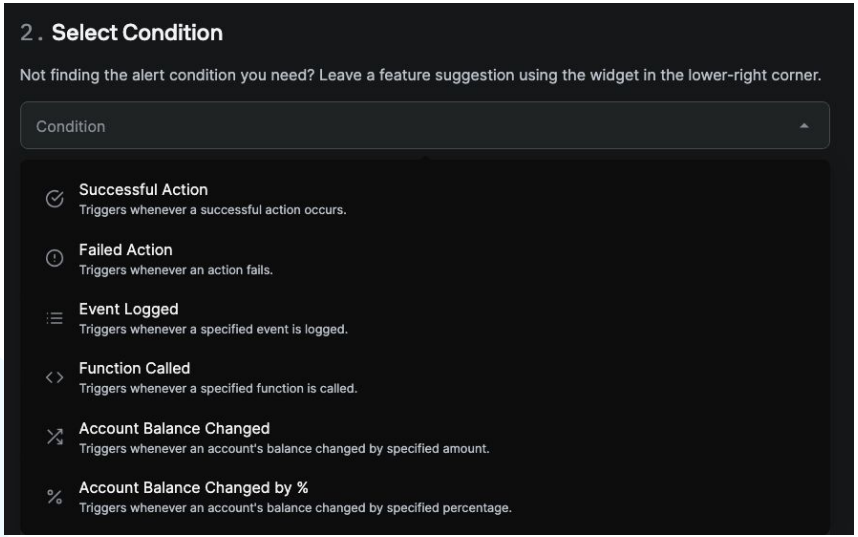
EVENT_JSON:{"data":[{"delegator_id":"marior.near","reward_token_amount":"109414402953460934?","reward_token_id":"f5cfbc74057c610c8ef151a439252680ac68c6dc.factory.bridge.near","share_bala1.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

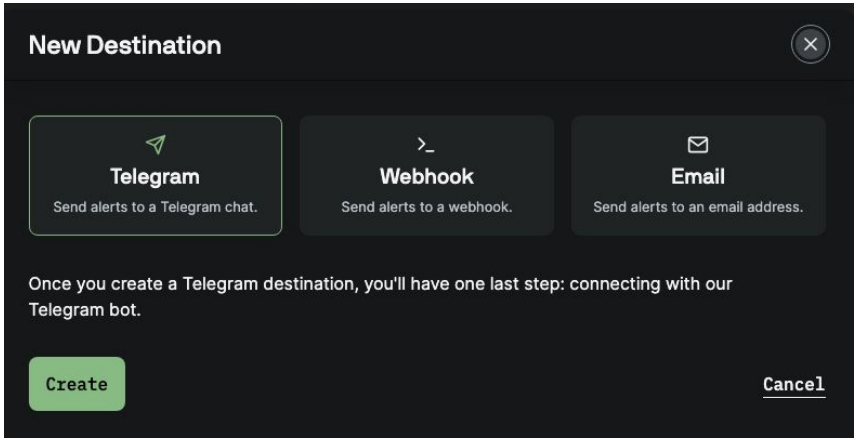
EVENT_JSON:{"data":[{"delegator_id":"xmen02109x.near","reward_token_amount":"6079575575668762?9","reward_token_id":"f5cfbc74057c610c8ef151a439252680ac68c6dc.factory.bridge.near","share_b1.near"}],"event":"delegator_receive_reward","standard":"lpos-market","version":"1.0.0"}

EVENT_JSON:{"data":

其他-使用Pagoda提供的监控工具

- 使用Pagoda提供的监控工具：https://console.pagoda.co/alerts/new-alert





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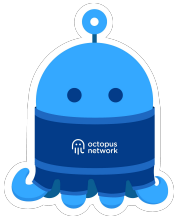
Thanks !