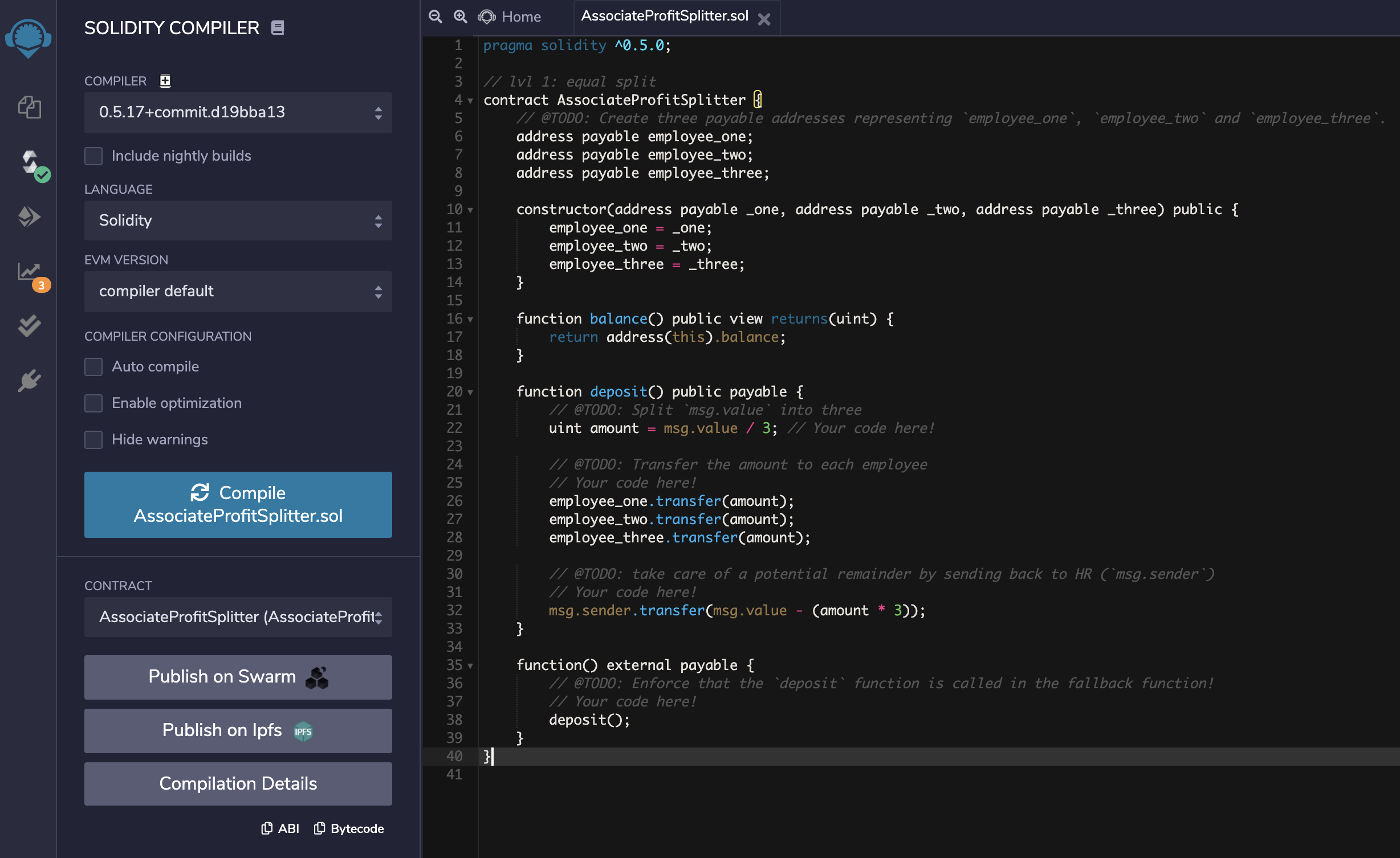
[https://remix.ethereum.org/#optimize=false&evmVersion=null&version=soljson-v0.5.17+commit.d19bba13.js](https://remix.ethereum.org/" \l "optimize=false&evmVersion=null&version=soljson-v0.5.17+commit.d19bba13.js)

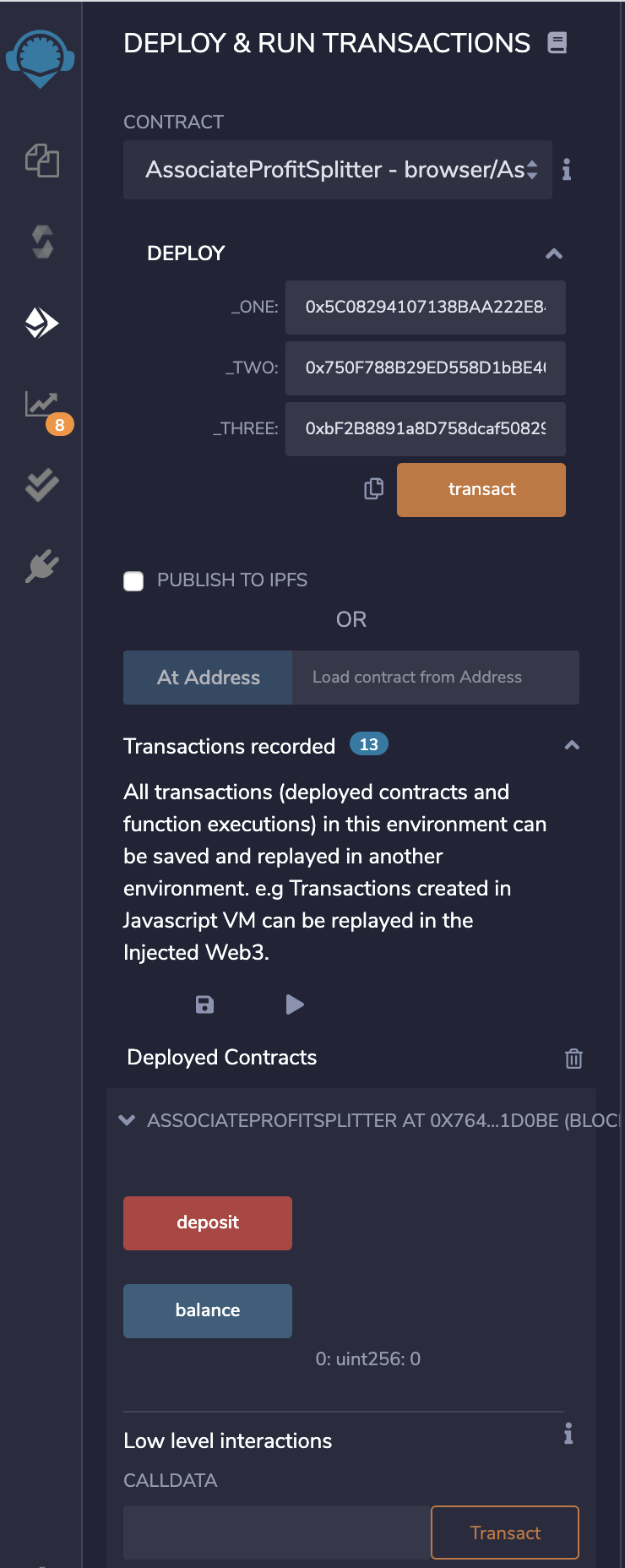


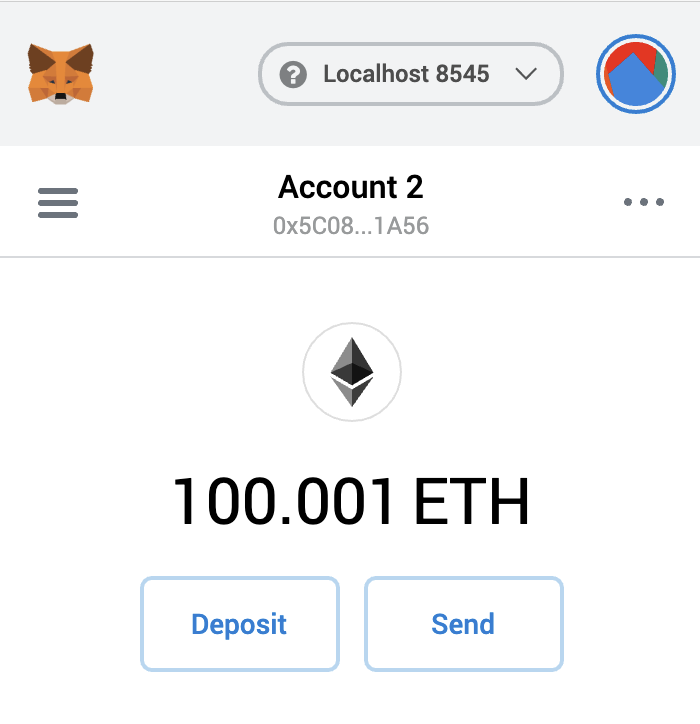
HR Address: **0x40De7759EF972F8DB32D0cf55b589d37ec817Db8**

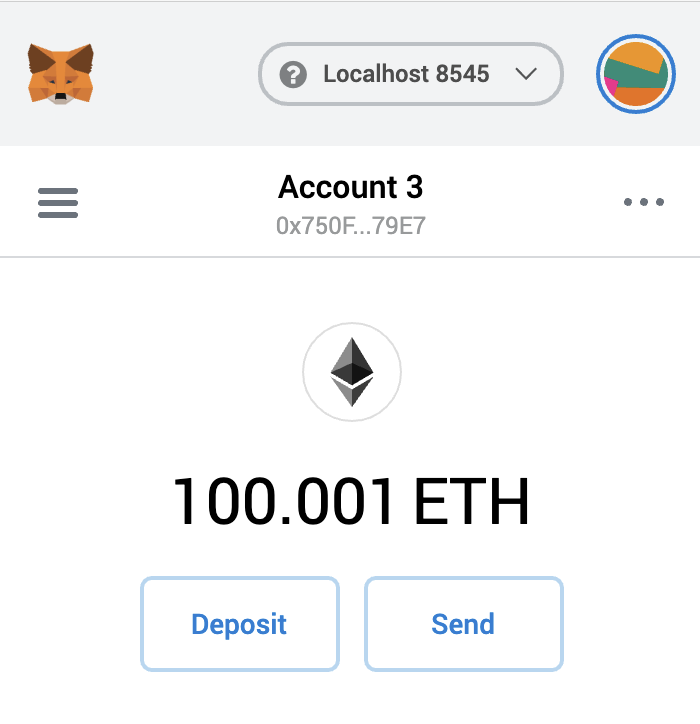
Employee1 Address: **0x5C08294107138BAA222E84CF69FCBbC599081A56**

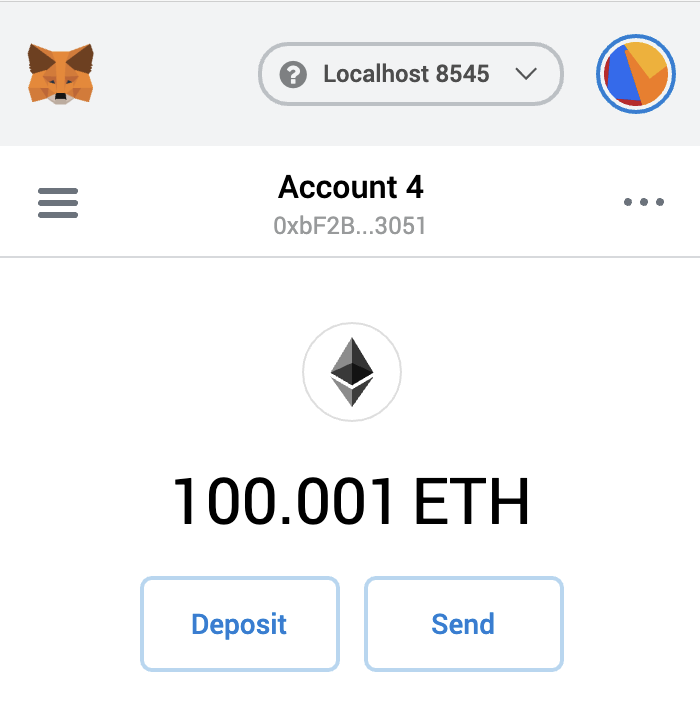
Employee2 Address: **0x750F788B29ED558D1bBE401f7E67bC699fbe79E7**

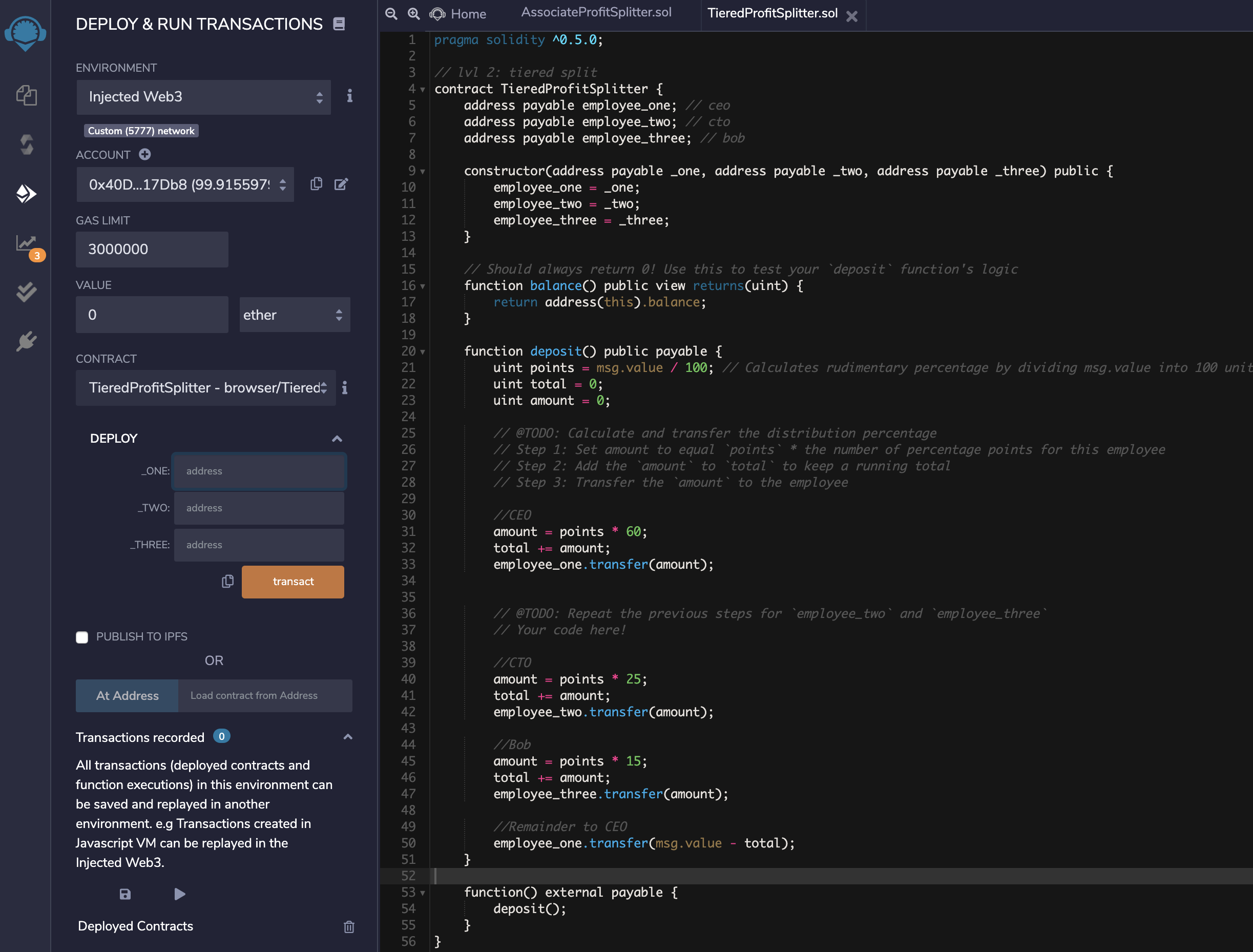
Employee3 Address: **0xbF2B8891a8D758dcaf50829Dc2356C199E0f3051**

****

****

****

****

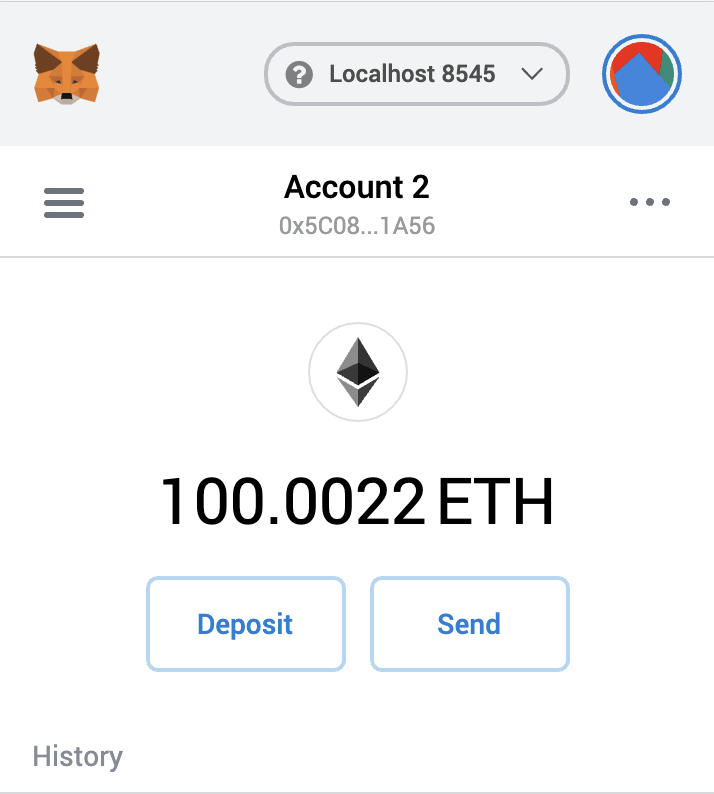
****

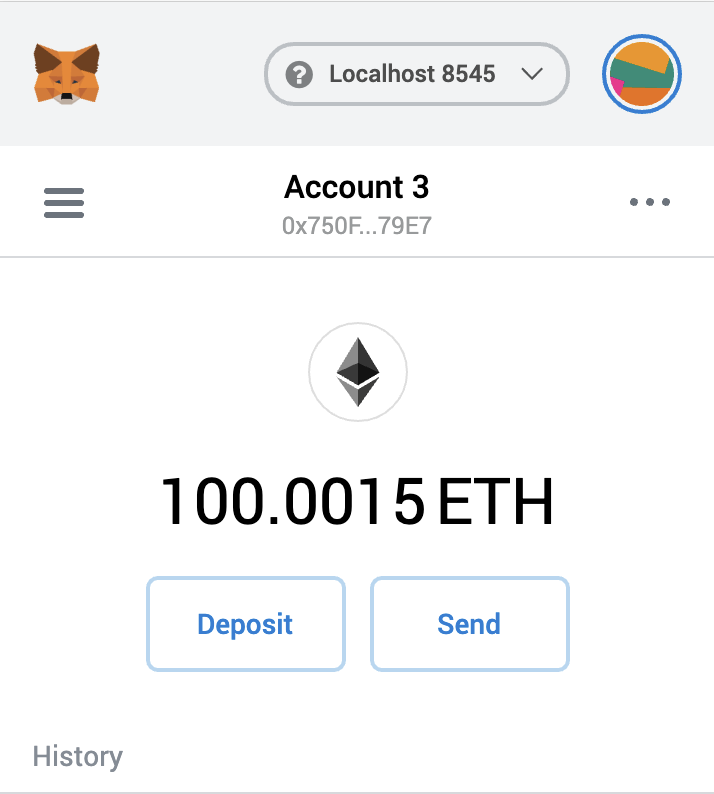
HR Address: **0x40De7759EF972F8DB32D0cf55b589d37ec817Db8**

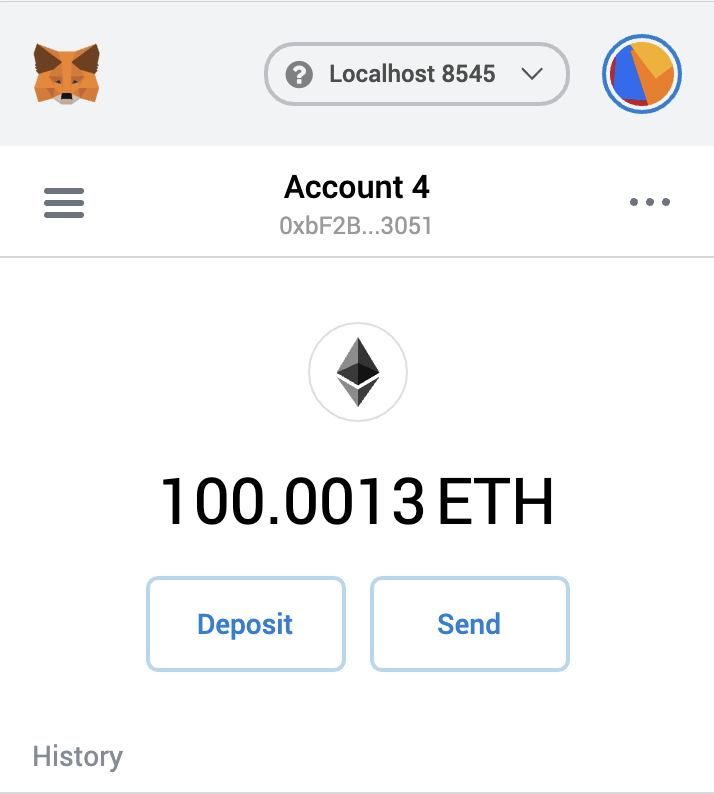
CEO Address: **0x5C08294107138BAA222E84CF69FCBbC599081A56**

CTO Address: **0x750F788B29ED558D1bBE401f7E67bC699fbe79E7**

Bob Address: **0xbF2B8891a8D758dcaf50829Dc2356C199E0f3051**

****

****

****

|  |
| --- |
| Pragma solidity ^0.5.0; |
|  |  |
|  | // lvl 3: equity plan |
|  | contract DeferredEquityPlan { |
|  | address human\_resources; |
|  |  |
|  | address payable employee; // bob |
|  | bool active = true; |
|  |  |
|  | uint total\_shares = 1000; |
|  | uint annual\_distribution = 250; // 1000 shares over 4 years |
|  |  |
|  | uint start\_time = now; // contract start time |
|  | uint unlock\_time = now + 365 days; // will increment every year |
|  |  |
|  | uint public distributed\_shares; // starts at 0 |
|  |  |
|  | constructor(address payable \_employee) public { |
|  | human\_resources = msg.sender; |
|  | employee = \_employee; |
|  | } |
|  |  |
|  | function distribute() public { |
|  | require(msg.sender == human\_resources || msg.sender == employee, "You are not authorized to execute this contract."); |
|  | require(active == true, "Contract not active."); |
|  | require(unlock\_time <= now, "Shares have not vested yet!"); |
|  | require(distributed\_shares < total\_shares, "All shares have been distributed."); |
|  |  |
|  | unlock\_time += 365 days; // lock for another year |
|  | distributed\_shares = (now - start\_time) / 365 days \* annual\_distribution; // calculate total shares from how many years have passed \* annual\_distribution |
|  |  |
|  | // double check in case the employee does not cash out until after 5+ years |
|  | if (distributed\_shares > 1000) { |
|  | distributed\_shares = 1000; |
|  | } |
|  | } |
|  |  |
|  | // human\_resources and the employee can deactivate this contract at-will |
|  | function deactivate() public { |
|  | require(msg.sender == human\_resources || msg.sender == employee, "You are not authorized to deactivate this contract."); |
|  | active = false; |
|  | } |
|  |  |
|  | function() external payable { |
|  | revert("Do not send Ether to this contract!"); |
|  | } |
|  | } |