## 合约交互指南

• 说明:使用在线版remix-ide进行交互,网站:https://remix.ethereum.org/

```
▼ 1.将代码复制到工作空间的目录下,如果有import,import里面的 .sol文件也要复制到相应的目录
```

```
▶ Q Q 🖟 Home 💈 MyToken.sot 🗙
FILE EXPLORER
                                                     pragma solidity ^0.8.4;
ozerc20
                                                      import "@openzeppelin/contracts-upgradeable/token/ERC20/ERC20Upgradeable.sol";
                                                      import "@openzeppelin/contracts-upgradeable/token/ERC20/extensions/ERC20BurnableUpgradeable.sol"
* D 🗅 O 🕹
                                                     import "@openzeppelin/contracts-upgradeable/security/PausableUpgradeable.sol";
import "@openzeppelin/contracts-upgradeable/access/OwnableUpgradeable.sol";
import "@openzeppelin/contracts-upgradeable/proxy/utils/Initializable.sol";
                                                      import "@openzeppelin/contracts-upgradeable/proxy/utils/UUPSUpgradeable.sol";
in .deps
                                                       contract MyToken is Initializable, ENC20Upgradeable, ENC20UurnableUpgradeable, PausableUpgradeable, OwnableUpgradeable, UUPSUpgradeable {
                                                          constructor() {
                                                               __ERC20_init("MyToken", "MTK");
                                                                _ERCZ08urnable_imit();
                                                               Pausable init();
                                                               __Ownable_init();
                                                               __UUPSUpgradeable_init();
                                                               function pause() public onlyowner {
                                                               _pause();
                                                          function unpause() public onlyOwner {
                                                              _unpause();
```

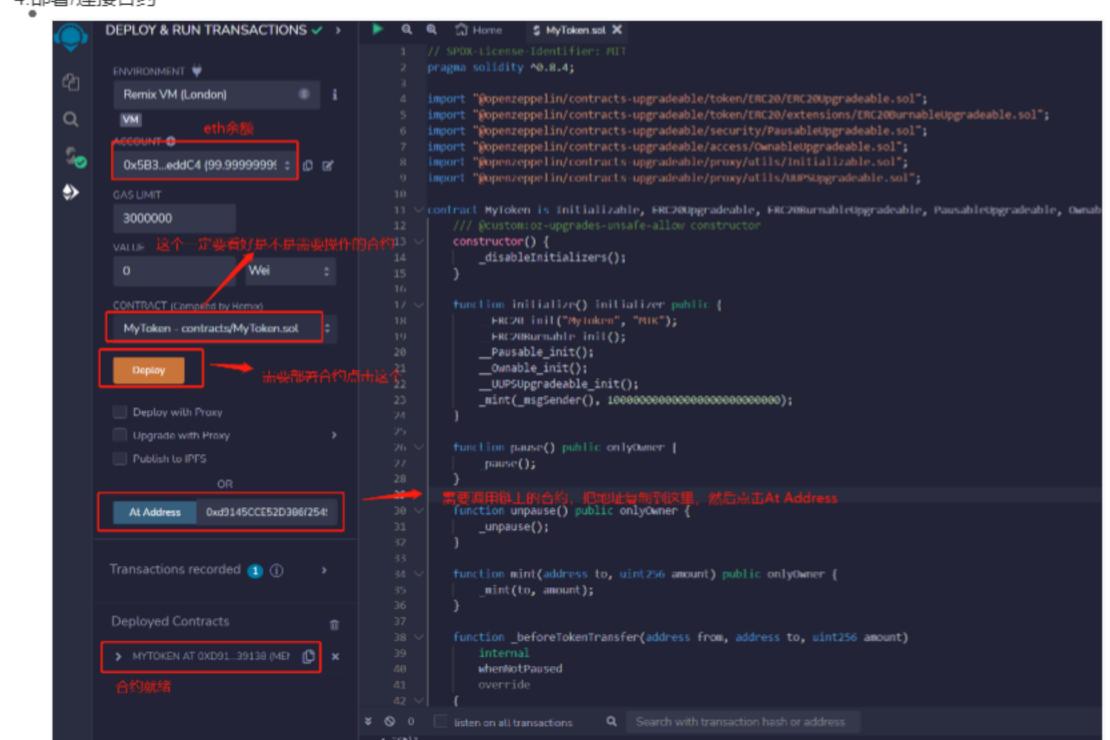
▼ \* 2.编译合约

```
SOLIDITY COMPILER
                                      ✓ > ▶ Q. Q. (i) Home $ MyToken.sol X
 COMPILER + 🖺
 0.8.17+commit.8df45f5f
                                                        inport "@openzeppelin/contracts-upgradeable/token/ERC20/ERC20Upgradeable.sol";
inport "@openzeppelin/contracts-upgradeable/token/ERC20/extensions/ERC20BurnableUpgradeable.sol";
                                                          import "@openzeppelin/contracts-upgradeable/security/PausableUpgradeable.sol";
import "@openzeppelin/contracts-upgradeable/access/OwnableUpgradeable.sol";
import "@openzeppelin/contracts-upgradeable/proxy/utils/Initializable.sol";
import "@openzeppelin/contracts-upgradeable/proxy/utils/UUPSUpgradeable.sol";
 Advanced Configurations
                                                             contract MyToken is Initializable, ERC20Upgradeable, ERC20BurnableUpgradeable, PausableUpgradeable, OwnableUpgradeable, UUPSUpgradeable {
      Solidity
                                                                     ERC20 init("MyToken", "MTK");
                                                                      Ownable_init();
                                                                      __uuPSupgradeable_init();
                                                                      function pause() public onlyOwner {
         Compile MyToken.sol
                                                                function unpause() public onlyOwner {
   Compile and Run script i 0
                                                               function mint(address to, wint256 amount) public onlyOwner (
   MyToken (MyToken.sol)
                                                                 function _beforeTokenTransfer(address from, address to, uint256 amount)
          Publish on lpfs 🙃
                                                                    whenNotPaused
         Publish on Swarm &
          Compilation Details
                      ABI Bytecode
```

▼ \* 3.选择节点

```
CARLES pragma solidity ^0.8.4;
  Remix VM (London)
                                             4 import "@openzeppelin/contracts-upgradeable/t
                                                import "@openzeppelin/contracts-upgradeable/
  Remix VM (London)
                                             6 import "@openzeppelin/contracts-upgradeable/
                                                import "@openzeppelin/contracts-upgradeable/a
import "@openzeppelin/contracts-upgradeable/p
import "@openzeppelin/contracts-upgradeable/p
  Remix VM (Berlin)
  Injected Provider
  Hardhat Provider
                                                 contract Mytoken is Initializable, FRC20Upgrad
  Ganache Provider
                                                     constructor() {
  Foundry Provider
                                                         _disableInitializers();
  Wallet Connect
  External Http Provider
                                                     function initialize() initializer public
                                                           ERC20_init("MyToken", "MTK");
  L2 - Optimism Provider
                                                           ERC20Burnable init();
                                                          _Pausable_init();
                                                          __Ownable_init();
                                                          __UUPSUpgradeable_init();
                                                          _mint(_msgSender(), 1000000000000000
```

▼ 4.部署/连接合约



```
DEPLOY & RUN TRANSACTIONS ✓ >  

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MyToken.sol 

X
                                             import "@openzeppelin/contracts-upgradeable/proxy/utils/UUPSUpgradeable.sol";
                                         11 contract MyToken is Initializable, ERC20Upgradeable, ERC20BurnableUpgradeable, Paus
Transactions recorded (6) (1) >
                                                 constructor() {
                                                      _disableInitializers();
Deployed Contracts
                                                 function initialize() initializer public {
                                                      __ERC20_init("MyToken", "MTK");
                                                      _ERC208urnable_init();
                                                      function pause() public onlyOwner {
                                                      _pause();
                                                  function unpause() public onlyOwner {
                                                 function mint(address to, wint256 amount) public onlyOwner {
                                                      _mint(to, amount);
                                                  function _beforeTokenTransfer(address from, address to, uint256 amount)
                                                     whenNotPaused
                                                       uper._beforeTokenTransfer(from, to, amount);
                                                  function _authorizeUpgrade(address newImplementation)
                                                     onlyOwner
                                         🔞 [va] from: 0x588...edd24 to: MyTaken.initialize() 0x374...F771B value: 0 vei data: 0x812...9fc1c
                                         📝 [vn] from: CxTES...edd14 to: MyTokan. (canstructor) value: 0 wel data: 0x50a...10033 logs: 1 hash
```