

Lab : Setting Up A Local Solidity Environment Smart Contract Development

Several methods exist to setup a local environment for Solidity smart contracts development. The easiest way is to use the desktop version of Remix IDE. We can also setup an environment based on Visual Studio Code extensions (VS Code). Among the extensions available are : Ethereum Remix extension, Truffle for VS Code, ...

Remix Desktop : Remix IDE offline

Go to the Remix IDE GitHub page : <https://github.com/ethereum/remix-desktop/releases>

Choose the latest version (You can choose another version)

Click on the executable version for Windows : [Remix-IDE-Setup-1.3.6.exe](#)

Follow the on-screen instructions

Go to : File → Open Folder (Create new folder before)

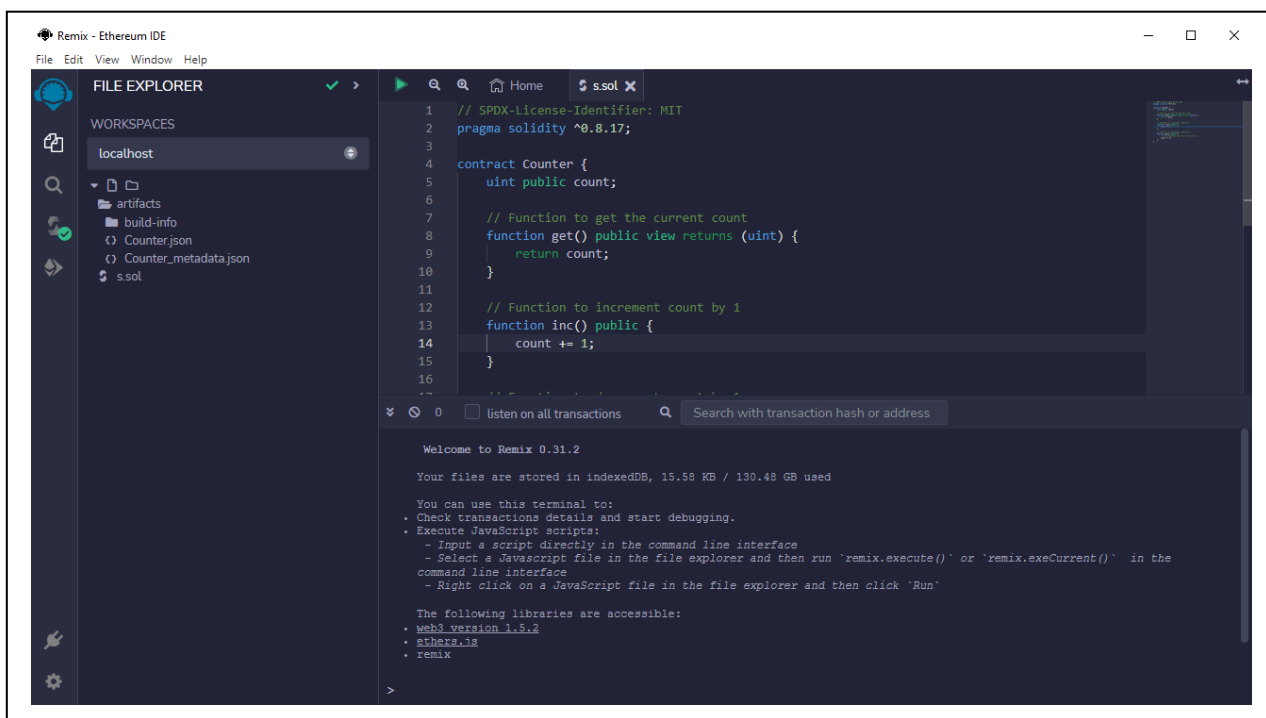
At this step you can Create New File with .sol extension and compile and deploy it

You can also use Ganache blockchain simulator to deploy and run smart contracts.

You can download Ganache from : <https://trufflesuite.com/ganache/>

To connect to Ganache change the environment : [Dev - Ganache Provider](#)

(Click on icon Deploy & Run Transactions → Environment)



VS Code Extensions : Ethereum Remix extension, Truffle for VS Code

Go to the nodejs download page : <https://nodejs.org/en/download/>

Download and Install nodeJS with npm (Choose Recommended for Most Users)

Install truffle suite using the command : `npm install truffle -g`

Download and install Ganache from : <https://trufflesuite.com/ganache/>

Download and Install VS Code from : <https://code.visualstudio.com/download>

Go to VS Code → Icon extensions → Search the extension (Truffle or Remix) you want to install :

Search and install [Truffle for VS Code](#)

Search and install [Ethereum Remix](#) (Need Internet connection to work)