

Introduction to Smart Contracts and Solidity

Part 8 - Installation of the Solidity Compiler via
Docker on Ubuntu

What is Docker

An open platform for...

- Developing...
- Shipping...
- Running...
- ... applications

Container

- A loosely isolated environment
- Lightweight
- Resource-equipped

Docker software lifecycle (short overview)

Image

- Available from an image repository
- Self-prepared image

Image reference

- `organization/image:tag`
- Tag is commonly used as a version marker

Container

- Image instantiation
- Run = download (if unavailable) + start

Solidity compiler via Docker

Requirements

- Local directory to be mounted in Docker container
- Source code for compilation to bytecode
- Destination directory for the compiler output (can be created by the compiler)

Simple command for running the compiler

- `$ docker run -v ~/solidity_src:/sources ethereum/solc:stable -o /sources/output --abi --bin /sources/1_Storage.sol`

Compiler run successful. Artifact(s) can be found in directory "/sources/output".