



Harmony Box

Harmony Box is a Truffle box that will get you quickly up and running deploying smart contracts on Harmony using Truffle & native Ethereum tooling.

Getting started

Truffle

If you have Truffle installed globally:

(Until the box has been approved by Truffle you have to rely on the git installation step below)

`mkdir harmony && cd harmony truffle unbox harmony` Or if you want to install via git:

`git clone https://github.com/harmony-one/harmony-box.git cd harmony-box`

.env

Copy `.env-example` to `.env`:

`cp .env-example .env` Modify `.env` and replace "ENTER_PRIVATE_KEY_HERE " for each network with the respective private key you want to use when deploying contracts.

Dependencies

Install all required dependencies using yarn:

`yarn install` The dependencies installed are the following:

- truffle: if you want to use a local installation rather than a global installation
- solc: Solidity compiler
- @trufflesuite/web3-provider-engine: framework for composing custom web3 providers
- ethereumjs-wallet: a lightweight Ethereum wallet implementation
- @openzeppelin/contracts: industry standard smart contract templates
- dotenv: .env file parsing library

Compilation

Globally installed Truffle:

`truffle compile`

Locally installed Truffle:

`node_modules/.bin/truffle compile`

Migration

The Harmony Box comes pre-configured with three separate networks:

- Localnet (<http://localhost:9500>)
- Testnet (<https://api.s0.b.hmny.io>)
- Mainnet (<https://api.s0.t.hmny.io>)

To deploy your contracts to these networks, you can run the following:

Globally installed Truffle:

`truffle migrate --reset --skip-dry-run --network localnet truffle migrate --reset --skip-dry-run --network testnet truffle migrate --reset --skip-dry-run --network mainnet`

Locally installed Truffle:

`node_modules/.bin/truffle migrate --reset --skip-dry-run --network localnet node_modules/.bin/truffle migrate --reset --skip-`

```
dry-run --network testnet node_modules/.bin/truffle migrate --reset --skip-dry-run --network mainnet
```

Testing¶

Globally installed Truffle:

```
truffle test
```

Locally installed Truffle:

```
node_modules/.bin/truffle test
```

Attribution¶

[private-provider.js](#) was originally ported from [Moonbeam's Truffle Box](#) .