Your First Sui dApp

Before you can create your first dApp on the Sui network, you must have Sui installed.

dApp stands for "decentralized application", which is an application that runs on a blockchain or decentralized network instead of a centralized server. Typical dApps do not run solely on the blockchain, but instead are composed of different pieces, like a TypeScript frontend that interacts with code that lives on a blockchain. Sui needs code written in Move for the pieces of a dApp that live on chain. These pieces are referred to as packages, modules, or smart contracts.

The instructions in this section walk you through writing a basic package, debugging and testing your code, and publishing. You need to follow these instructions in the order they appear to complete the exercise.

You use the move Sui CLI command for some instructions. The Sui CLI installs with the binaries, so you have it on your system if you follow the install instructions. To verify you have it installed, run the following command in a terminal or console.

If the console does not respond with a version number similar to the following, see the instructions to install Sui.

After installing Sui, you can connect to a network. Sui has three public networks (Devnet, Testnet, Mainnet), and you can also run and connect to a local Sui network. For each network, you need an on-chain address specific to that network. The address is an object with a unique ID in the form 0x8bd4613c004aac53d06bb7ceb7f46832c9ae69bdc105dfc5fcac225d2061fcac . In addition to that address, you need SUI to pay for the gas fees associated with your on-chain activity, like publishing packages and making Move calls to those packages. For all networks besides Mainnet, you can get free SUI coins for your account to facilitate package development. For the purposes of this example, connect to the Testnet network.

If you already have a network config set up, switch your active environment to Testnet. The following instruction is for the initial set up.

You are now connected to the Sui Testnet network and should have an account with available SUI.

Connecting to a network

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