

Smart Contract Compilation

- The Solidity source code is passed to the solidity compiler and the compiler returns the **EVM bytecode** that is deployed and the contract **ABI - Abstract Binary Interface**.
- There are many solidity compilers available: Remix built-in compiler, solc, solcjs
- **Contract bytecode is public**. It is saved on the Blockchain and can't be encrypted because it must be run by every Ethereum node;
- **Opcodes** are the human readable instructions of the program. They can be easily obtained from bytecode;
- Contract source code doesn't have to be public. Most contracts are public to build trust.

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- Anyone that wants to interact with the contract must have access to the contract ABI. ABI is basically **how you call functions** in a contract and get data back;
- ABI is list of contract's function and arguments and it's in **JSON format**. ABI is known at compile time.
- ABI is generated from source code through compilation. **If we don't have the source code we can't generate the contract ABI** (or only from the bytecode using reverse engineering);