# Decentralized System

Solidity (cnt'd)

# **Verify Smart Contract**



# Verification what and why?

- Smart contract verification is the process of matching a smart contract's source code to its on-chain bytecode
- Important step to ensure its transparency and security
  - The source code becomes visible in the blockchain
  - Full advantage of tools that rely on source code
  - Contribute to the **trustlessness** of the entire ecosystem

### Verification how to?

#### Steps

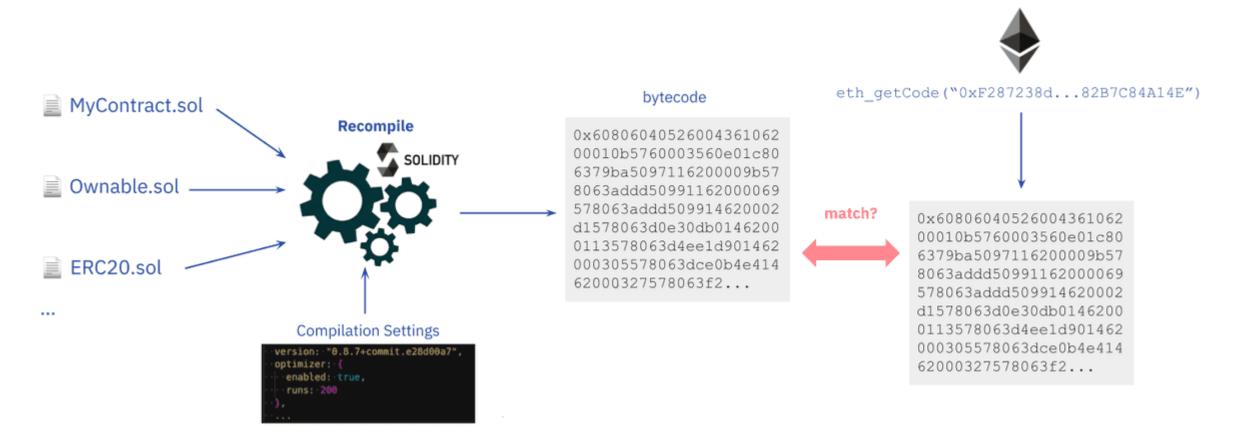
- Compile the Solidity code
- Obtain the bytecode and the ABI
- Deploy the bytecode to the Ethereum blockchain (testnet)
- Visit the Explorer (Etherscan) and find the page of the contract using its address

### Verification how to?

#### Steps

- Open the contract details page and click on the "Verify and Publish" link
- Input verification details: solidity compiler version, source code, appropriate license, any optimization settings
- Enter constructor arguments, if any, in the correct order in the verification form
- Click the "Verify and Publish" or equivalent button to submit the contract for verification

## Verification how to?



You can also use Remix for Smart Contract verification, by installing a proper extension

