ICE center@ETH

Smart Contract Security - Securify

Hubert Ritzdorf

Smart Contract Security

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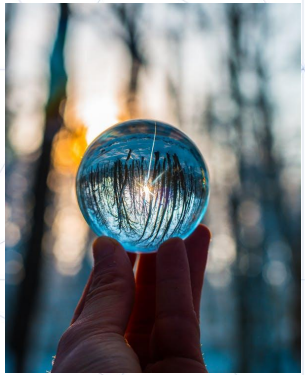
  - Code and state publicly visible
  - Everyone can interact
  - Handle funds



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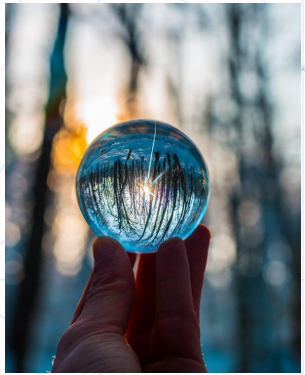

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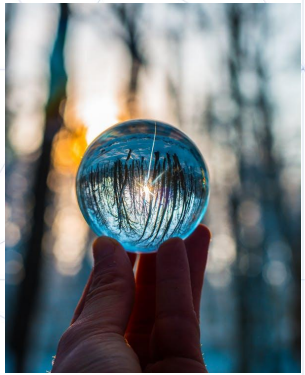
- Real Problem?
  - DAO Hack (2016): caused a hard-fork
  - Parity Multi-Sig Bug (2017): 153,037 ETH (~ 15 million USD)
  - Spankchain Hack (2018): 165.38 ETH (10,000 USD)



What is Securify? – Simply Explained

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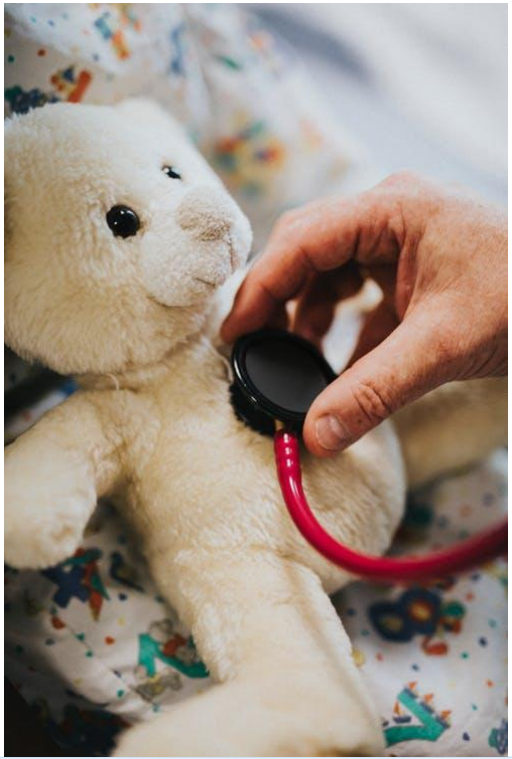

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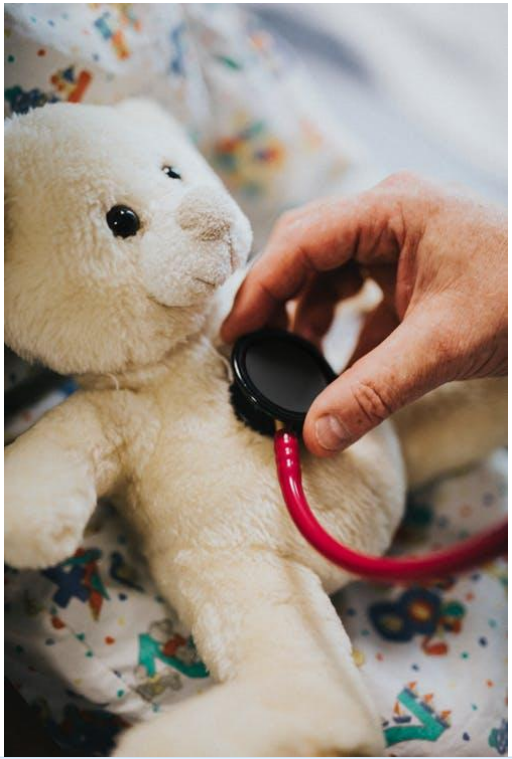

- Metasploit for Smart Contracts
- Basic checks

What is Securify? - More complex

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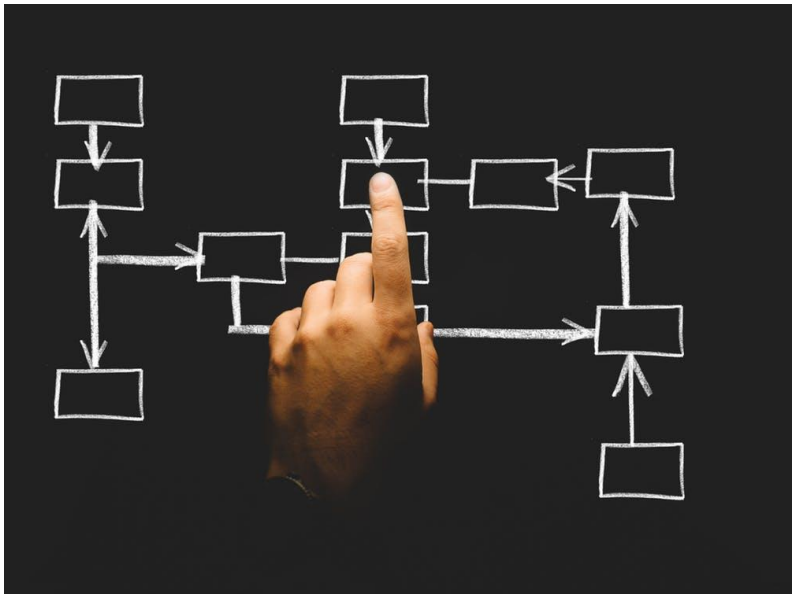
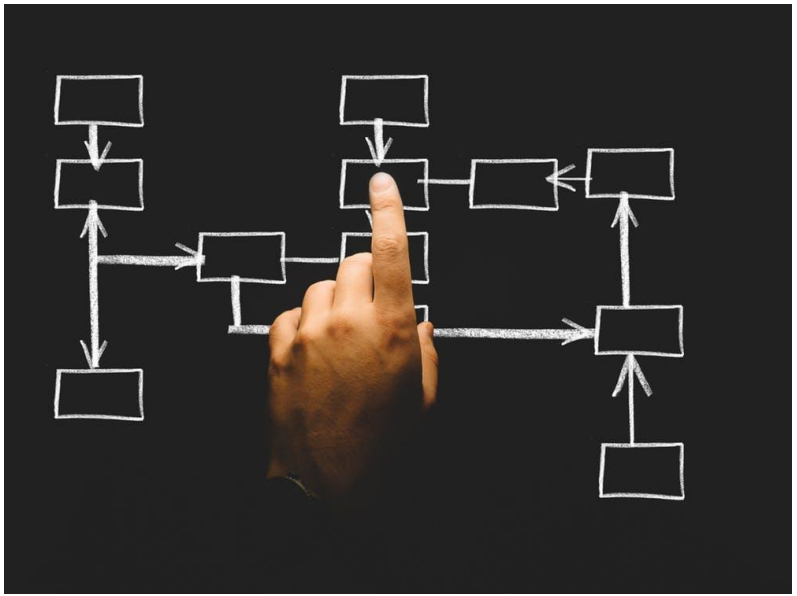


- Dependency Graph
- Compliances and Violations

What is Securify? - More complex



- Dependency Graph
- Compliances and Violations

- Reentrancy
- Missing authorization
- ...

Try it! https://securify.ch

SCAN NOW | REQUEST AUDIT | PASTE CODE | UPLOAD ZIP | CLONE GIT

```
1  library SafeMath {
2    function add(uint256 a, uint256 b) returns (uint256 c) {
3      c = a + b;
4      assert(c >= a);
5      return c;
6    }
7
8  function mul(uint256 a, uint256 b) internal pure returns (uint256 c) {
9    if (a == 0) {
10     return 0;
11   }
12   c = a * b;
13   assert(c / a == b);
14     return c;
```

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