

# Snipverse — The Web3 Immune System

*A Developer-First Security Standard*

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“We don’t prevent every hack. We make every user part of the immune response.”

## The Problem

You ship a contract. You renounce ownership. You get audited. Still — one phishing link, one fake frontend, one rogue approval — and your users are drained before you wake up.

## Why Current Tools Fail

Tool	Flaw
Etherscan labels	Too slow
Chainalysis	Closed, private
Exchanges	Weeks of silence
Community	Blind

## The Snipverse Solution

Four on-chain primitives that turn users into sentinels:

Layer	Mechanism	Developer Benefit
1. On-chain Sentinel Layer	Signed watcher contracts	Users act as antibodies
2. Immutable Deployer Proof	`owner = 0x0` + registry badge	Code can’t be changed
3. Real-time Public Monitoring	Live tx feed + alerts	I see the attack as it starts
4. Instant Signal Hotline	Community → Etherscan tag → insurers	We react in minutes

## This Is a Protocol, Not a Product

- Open standard
- Zero trust
- Community-owned
- Composable

Think HTTPS padlock — but for Web3.

## MVP in 6 Weeks

Week	Deliverable
------	-------------

1	`SnipRegistry.sol` + logo upload
2	`renounceAndLock()` + badge
3	Dune dashboard + Telegram bot
4	"Hotline" signed alert → Etherscan tag
5	Wallet UI integration
6	Launch with 5 real projects

## Developer Quickstart

npm install @snipverse/shield

```
import { SnipShield } from "@snipverse/shield";
```

```
contract MyToken is ERC20, Ownable, SnipShield {
  constructor(address registry)
    ERC20("MyToken", "MTK")
    SnipShield(registry, address(this))
  {}

  function launch() external onlyOwner {
    renounceOwnership();
    _snipLockForever(); // Shield activated
  }
}
```

## Appendix — Full Source Code

This appendix contains all referenced source files in full, formatted for line-by-line developer review.

*SnipRegistry.sol (Solidity)*

// SPDX-License-Identifier: MIT

pragma solidity ^0.8.24;

```
contract SnipRegistry {
    struct Project {
        address deployer;
        bytes32 logoHash;
        uint256 lockedAt;
        string name;
        string website;
        bool exists;
    }

    mapping(address => Project) public projects;
    address[] public projectList;

    event Registered(address indexed contractAddr, address deployer, bytes32 logoHash, string name);
    event LogoUpdated(address indexed contractAddr, bytes32 newHash);

    function register(
        address contractAddr,
        bytes calldata logoSVG,
        string calldata name,
        string calldata website
    ) external {
        require(!projects[contractAddr].exists, "Already registered");
        bytes32 hash = keccak256(logoSVG);

        projects[contractAddr] = Project({
            deployer: msg.sender,
            logoHash: hash,
            lockedAt: 0,
            name: name,
            website: website,
            exists: true
        });

        projectList.push(contractAddr);
        emit Registered(contractAddr, msg.sender, hash, name);
    }

    function lockForever(address contractAddr) external {
        Project storage p = projects[contractAddr];
```

```

        require(p.exists && p.deployer == msg.sender && p.lockedAt == 0, "Cannot lock");
        p.lockedAt = block.timestamp;
    }

    function updateLogo(address contractAddr, bytes calldata logoSVG) external {
        Project storage p = projects[contractAddr];
        require(p.exists && p.deployer == msg.sender && p.lockedAt == 0, "Cannot update");
        p.logoHash = keccak256(logoSVG);
        emit LogoUpdated(contractAddr, p.logoHash);
    }
}

SnipShield.sol (Solidity, helper mixin)
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.24;

interface ISnipRegistry {
    function lockForever(address contractAddr) external;
    function projects(address)
        external
        view
        returns (
            address deployer,
            bytes32 logoHash,
            uint256 lockedAt,
            string memory name,
            string memory website,
            bool exists
        );
}

/// @title SnipShield
/// @notice Minimal helper mixin that calls into SnipRegistry to lock a target contract forever.
abstract contract SnipShield {
    address public immutable snipRegistry;
    address public immutable snipTarget;

    event SnipLocked(address indexed target, uint256 lockedAt);

    constructor(address registry, address target) {
        require(registry != address(0) && target != address(0), "Invalid address");
        snipRegistry = registry;
        snipTarget = target;
    }

    /// @dev Call this from your launch path after renouncing ownership.
    function _snipLockForever() internal {
        ISnipRegistry(snipRegistry).lockForever(snipTarget);
        (, , uint256 lockedAt, , , ) = ISnipRegistry(snipRegistry).projects(snipTarget);
    }
}

```

```

        require(lockedAt > 0, "Lock failed");
        emit SnipLocked(snipTarget, lockedAt);
    }
}

```

*SnipShield.tsx (React + wagmi)*

// SnipShield.tsx

```

import { useContractRead } from 'wagmi';
import type { Address } from 'viem';

```

```

const REGISTRY: Address = '0x...';

```

```

export default function SnipShield({ contractAddr }: { contractAddr: Address }) {
  const { data: project } = useContractRead({
    address: REGISTRY,
    abi: snipRegistryABI,
    functionName: 'projects',
    args: [contractAddr],
    watch: true
  });

```

```

  if (!project || !project.exists) return <div>Not Snip-protected</div>;

```

```

  const isLocked = Number(project.lockedAt) > 0;
  const label = isLocked ? 'Locked' : 'Active';

```

```

  return (
    <div className="snip-shield" style={{ display: 'flex', gap: 8, alignItems: 'center' }}>
      <img src={`data:image/svg+xml;base64,...`} width={20} height={20} alt="Snipverse Badge" />
      <span style={{ fontWeight: 600, color: isLocked ? '#22c55e' : '#eab308' }}>{label}</span>
    </div>
  );
}

```

*Dune SQL — Live Monitoring Query*

```

-- Dune SQL: High-value movements for registered projects in the last 5 minutes
SELECT block_time, tx_hash, "from", value / 1e18 AS eth
FROM ethereum.traces
WHERE contract_address IN (SELECT project FROM snipverse_projects)
  AND value > 1e18
  AND block_time > now() - interval '5 minutes';

```

*telegram-bot.js (Node.js, polling)*

// telegram-bot.js

// npm i node-telegram-bot-api axios

```

import TelegramBot from 'node-telegram-bot-api';
import axios from 'axios';

```

```

const BOT_TOKEN = process.env.TELEGRAM_TOKEN || 'TOKEN';
const CHAT_ID = process.env.CHAT_ID || '123456';

```

```
const DUNE_ENDPOINT = process.env.DUNE_ENDPOINT || 'https://api.dune.com/api/v1/query/.../results';
```

```
const bot = new TelegramBot(BOT_TOKEN, { polling: true });
```

```
async function fetchDuneResults() {  
  const { data } = await axios.get(DUNE_ENDPOINT, {  
    headers: { 'x-dune-api-key': process.env.DUNE_API_KEY || '' }  
  });  
  // adapt to your Dune response shape  
  return data.result?.rows || [];  
}
```

```
setInterval(async () => {  
  try {  
    const rows = await fetchDuneResults();  
    rows.forEach((row) => {  
      const msg = `*Snipverse Alert*\nValue: ${row.eth} ETH\n[Tx](https://etherscan.io/tx/${row.tx_hash})`;   
      bot.sendMessage(CHAT_ID, msg, { parse_mode: 'Markdown' });  
    });  
  } catch (e) {  
    console.error('Polling error', e);  
  }  
}, 60_000);
```

*scripts/deploy.js (Hardhat)*

```
// scripts/deploy.js
```

```
// npx hardhat run scripts/deploy.js --network <network>
```

```
const hre = require('hardhat');
```

```
async function main() {  
  const SnipRegistry = await hre.ethers.getContractFactory('SnipRegistry');  
  const registry = await SnipRegistry.deploy();  
  await registry.deployed();  
  console.log('SnipRegistry deployed to:', registry.address);  
}
```

```
main().catch((error) => {  
  console.error(error);  
  process.exitCode = 1;  
});
```

*Example: MyToken.sol (using SnipShield)*

```
// SPDX-License-Identifier: MIT
```

```
pragma solidity ^0.8.24;
```

```
import './SnipShield.sol';  
import '@openzeppelin/contracts/token/ERC20/ERC20.sol';  
import '@openzeppelin/contracts/access/Ownable.sol';  
contract MyToken is ERC20, Ownable, SnipShield {
```

```

constructor(address registry)
    ERC20('MyToken', 'MTK')
    SnipShield(registry, address(this))
{}

function launch() external onlyOwner {
    renounceOwnership();
    _snipLockForever(); // Shield activated
}
}

```

## Notes & Security Considerations

- Review registry permissions and consider adding EIP-712 signed requests for delegated locking.
- Ensure your deployment process captures the registry address immutably.
- Consider chain-agnostic IDs for cross-chain registries.
- Production deployments should add event indexing and circuit breaker patterns where appropriate.