

Inheritor - Mitigation: How to Protect Your Digital Will

Introduction

In today's increasingly digital world, planning for the transfer of your digital assets has become as essential as traditional estate planning. Inheritor provides a secure, blockchain-based solution for creating digital wills that ensure your digital assets reach their intended beneficiaries.

This document outlines the robust mitigation strategies that protect your digital will, ensuring continuity and access regardless of external circumstances. The resilience of your digital inheritance is not dependent on Inheritor's developers, Apple, or any single entity, but is instead secured through distributed blockchain technology and open-source tools.

The Distributed Nature of Inheritor

Inheritor's strength lies in its architecture, which leverages multiple decentralized technologies:

Blockchain Foundation

Your digital will exists as a smart contract on the Ethereum or Arbitrum blockchain, offering several key advantages:

- **Immutability:** Once deployed, smart contracts cannot be altered, ensuring your inheritance instructions remain exactly as you created them.
- **Decentralization:** The blockchain is maintained by thousands of nodes worldwide, eliminating any single point of failure.
- **Censorship Resistance:** No individual, company, or government can prevent the execution of your digital will.
- **Perpetual Operation:** As long as the Ethereum or Arbitrum networks exist, your digital will remains active and executable.

Permanent Storage with Arweave

Digital assets you wish to pass on are encrypted and stored on Arweave's "blockweave," a specialized blockchain designed for permanent data storage:

- **Pay Once, Store Forever:** Arweave's unique economic model ensures your assets remain accessible indefinitely with a single upfront payment.
- **Distributed Redundancy:** Your encrypted assets are stored across numerous nodes worldwide, virtually eliminating the risk of data loss.
- **Content Verification:** Cryptographic techniques ensure the integrity of your stored assets.

Cryptographic Security

Advanced encryption methods protect your digital assets until the appropriate time:

- **End-to-End Encryption:** Assets are encrypted with strong cryptographic algorithms before storage.
- **Time-Lock Mechanism:** The innovative smart contract design releases assets only when predefined conditions are met.
- **Beneficiary-Specific Encryption:** Only designated beneficiaries can decrypt the assets, using their unique cryptographic keys.

Independence from Inheritor and Apple

The execution of your digital will is fully independent of Inheritor's continued operation:

Smart Contract Autonomy

Once deployed, your digital will operates as an autonomous smart contract:

- **Self-Executing:** The contract automatically enforces the conditions you've defined.
- **No Backend Dependency:** No servers or backend systems controlled by Inheritor are required for execution.
- **No Central Authority:** The will execution does not require approval or action from Inheritor or any third party.

Beyond the App

While the Inheritor app provides a user-friendly interface, it is not essential for the core functionality:

- **Direct Blockchain Interaction:** Your digital will can be accessed and managed directly through the blockchain.
- **Public Standard Protocols:** All cryptographic methods and blockchain interactions use standardized, public domain protocols.
- **Open Documentation:** The technical workings of your digital will are fully documented and accessible.

Public Domain Emergency Tools

To ensure complete resilience in case the Inheritor app becomes unavailable, Inheritor has placed critical operational tools in the public domain. These emergency tools allow you and your beneficiaries to manage and access your digital will independently of the Inheritor app:

For Testators (Will Creators)

In emergency situations when the app is no longer available, the **Inheritor Emergency Management Tool** allows testators to:

- View all active inheritances and check-in status
- Perform check-ins to reset inheritance timers
- Revoke inheritances permanently if needed

For Beneficiaries

Two complementary emergency tools ensure beneficiaries can claim their inheritances even if the Inheritor app becomes unavailable:

1. **Beneficiary Check Tool:**

- Monitor the status of all designated inheritances
- Verify and trigger claimability of inheritances when conditions are met
- Recover unused ETH from the beneficiary wallet

2. **Beneficiary Claim Tool:**

- Retrieve encrypted assets from Arweave
- Decrypt assets using the beneficiary's cryptographic keys
- Save and access inherited digital assets

Community Development

These open-source tools provide a foundation that the wider community can build upon:

- **Adaptability:** The tools can be modified to adapt to future blockchain changes.
- **Extensibility:** Additional functionality can be added by developers.
- **Independence:** No permission from Inheritor is required to use or enhance these tools.

Practical Considerations

To maximize the resilience of your digital will:

Storing Recovery Information

- Keep your recovery mnemonic phrase in a secure, accessible location.
- Consider using a hardware wallet or secure storage solution for your private keys.
- Add multiple beneficiaries to your digital will—you never know what digital assets might become valuable to loved ones and relations in the future.
- Select a cloud storage service to back up your app data regularly. These backups only contain data critical for the continued use of the app—not your private keys or digital assets—so they can be stored without additional encryption.

Periodic Check-ins

- Perform regular check-ins through the app under normal circumstances.
- Set realistic check-in intervals that match your lifestyle.
- Consider adding verifiers for additional security.
- Think carefully about Legacy Interval Settings and their practical implications for your specific situation—consider your travel habits, access to technology, and potential emergency scenarios.

Emergency Preparedness

- Familiarize yourself with the emergency tools, which are designed for use only when the Inheritor app is no longer available.

- Ensure you understand how to operate these tools should an emergency situation arise where the app becomes inaccessible.
- Practice recovering private keys and accessing your Digital Will using the emergency tools in a safe test environment to ensure you're comfortable with the process.

Conclusion

The true value of Inheritor extends far beyond the app itself. By leveraging decentralized blockchain technology, permanent storage solutions, and open-source emergency tools, your digital will remains secure and executable regardless of the continued existence of Inheritor, Apple, or any other single entity.

This robust mitigation strategy ensures that your digital legacy will be passed on exactly as you intended, providing peace of mind that your digital assets will reach your beneficiaries even in unforeseen circumstances.

Your digital will is truly yours—distributed, resilient, and protected by the immutable security of blockchain technology.