Implementation of REA Contracts and Smart Contracts

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What We Talked About

• Contracts
  • Smart
  • Legal
  • REA

• REA Contracts
  • Trading Partner View
  • Independent View

• Implementation of REA Contracts in Solidity
  • Types
  • Ownership Transfers
Original trading partner contract ideas from AIAG
M1 REA Contract with Designated Happy & Unhappy Paths (incomplete specification of independent view contract)
Smart Contract

- Computer program which directly controls the transfer of digital currencies or assets under certain conditions. These contracts are stored on the blockchain.

- Self-executing contracts with the terms of agreement being directly written into the code. Allows trusted transactions (agreements) to be carried out among anonymous parties without a need for a contract authority, legal system, or external enforcement mechanism.

- Transactions are: traceable, transparent, and irreversible
Solidity Programming Language

• “Libraries”
  • safemath.sol - Checks math operations (binary representations)

• Standards/Tools
  • ownable.sol - Allows determination of appropriate individual
  • erc721.sol
  • erc20.sol