

Smart contract

Smart contracts are computer programmes that self-execute when certain conditions are met (based on the *if... then...* logic – i.e., if the goods are unloaded at port of X, then the funds are transferred). They state the obligations of each party to the “contract”, as well as the benefits and penalties that may be due to either party in different circumstances.

Symmetric key algorithms

One of the two types of algorithms used in encryption.* Symmetric key algorithms use the same key to encrypt and decrypt the text. They fall under what is called private-key cryptography.

Time-stamping

Time-stamping is the operation of using digital time-stamps (data representing date and time) to ensure that the chronological sequence of electronic events (e.g. creating or modifying a data file, submission or receipt of a transaction, etc.) is recorded. Each block on a blockchain contains a unique time-stamp.

Time-stamping is used for multiple purposes, such as computer security, network and database management, and as a proof of timely discharge of obligations among legally (contractually) bound parties in a given transaction. Multiple time-stamping protocols exist; their implementation depends on the outcome desired.