

Blockchain is the innovative database technology that's at the heart of nearly all cryptocurrencies. By distributing identical copies of a database across an entire network, blockchain makes it very difficult to hack or cheat the system. While cryptocurrency is the most popular use for blockchain presently, the technology offers the potential to serve a very wide range of applications. The name blockchain is hardly accidental: The digital ledger is often described as a "chain" that's made up of individual "blocks" of data. As fresh data is periodically added to the network, a new "block" is created and attached to the "chain." This involves all nodes updating their version of the blockchain ledger to be identical. How these new blocks are created is key to why blockchain is considered highly secure. A majority of nodes must verify and confirm the legitimacy of the new data before a new block can be added to the ledger. For a cryptocurrency, they might involve ensuring that new transactions in a block were not fraudulent, or that coins had not been spent more than once. This is different from a standalone database or spreadsheet, where one person can make changes without oversight.