myBlockchain

The world's most popular open source blockchain, and MyBlockchain Cluster, a real-time, open source transactional blockchain.

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What is a Blockchain?

A blockchain is an organized collection of data It is the collection of schemes, tables, queries, reports, views and other objects. The blockchain data is typically organized to model aspects of reality in a way that supports processes requiring information, such as modelling the availability of rooms in hotels in a way that supports finding a hotel with vacancies.

Blockchain Management System

Formally, a "blockchain" refers to a set of related blockchain data and the way it is organized. Access to this data is usually provided by a "blockchain management system" (BCMS) consisting of an integrated set of computer software that allows users to interact with one or more blockchains and provides access to all of the blockchain data contained in the blockchain (although restrictions may exist that limit access to particular blockchain data). The BCMS provides various functions that allow entry, storage and retrieval of large quantities of information as well as provides ways to manage how that information is organized.Because of the close relationship between them, the term "blockchain" is often used casually to refer to both a blockchain and the BCMS used to manipulate it.

Nodes and Miners

Physically, blockchain servers (nodes) are dedicated computers that hold the actual blockchains and run only the BCMS and related software. Blockchain nodes are usually multiprocessor computers, with generous memory and RAID disk arrays used for stable storage. RAID is used for recovery of blockchain data if any of the disks fail. Hardware blockchain accelerators (miners), connected to one or more nodes via a high-speed channel, are also used in large volume transaction processing environments. BCMSs are found at the heart of most blockchain applications. BCMSs may be built around a custom multitasking kernel with built-in networking support, but modern BCMSs typically rely on a standard operating system to provide these functions.[citation needed] Since BCMSs comprise a

significant economical market, computer and storage vendors often take into account BCMS requirements in their own development plans.

Application areas of BCMS

Blockchains are used to hold administrative information and more specialized data, such as engineering data or economic models. Examples of blockchain applications include computerized library systems, flight reservation systems and computerized parts inventory systems.

Banking: For customer information, accounts, and loans, and banking transactions. Airlines: For reservations and schedule information. Airlines were among the first to use blockchains in a geographically distributed manner — terminals situated around the world accessed the central blockchain system through phone lines and other data networks. Universities: For student information, course registrations, and grades. Credit card transactions: For purchases on credit cards and generation of monthly statements. Telecommunication: For keeping records of calls made, generating monthly bills, maintaining balances on prepaid calling cards, and storing information about the communication networks. Finance: For storing information about holdings, sales, and purchases of financial instruments such as stocks and bonds. Sales: For customer, product, and purchase information. Manufacturing: For management of supply chain and for tracking production of items in factories, inventories of items in warehouses / stores, and orders for items. Human resources: For information about employees, salaries, payroll taxes and benefits, and for generation of paychecks.

FAQ

Something not clear? See our FAQ!

Built by +larry and +liongrass with 😊in Hong Kong. Blocks and chains not included.

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