

Research on Information Security Technology Based on Blockchain

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Abstract

- ▶ Information security is the key to the development of modern Internet technology. The distributed mechanism, decentralized mechanism, password mechanism and scripted mechanism of the Block chain present a completely new perspective for the development of Internet information security technology.
- ▶ The Block chain technology redefines the storage and dissemination methods of the information in the network. Neither participant needs to know each other, and nor does it require third-party certification bodies to participate.
- ▶ It records, transmits and stores transferring activities of the information value by distributed technology, ensures that data is not tampered and forged based on an asymmetric cryptographic algorithm, enables all participants reached a consensus on the status of block chain data information.
- ▶ And from the current industry research on block chain technology, it expounds the application of block chain technology in identity authentication, data protection and network security.

Existing

- ▶ The Blockchain technology redefines the storage and dissemination methods of the information in the network. Neither participant needs to know each other, and nor does it require third-party certification bodies to participate.
- ▶ It records, transmits and stores transferring activities of the information value by distributed technology, ensures that data is not tampered and forged based on an asymmetric cryptographic algorithm, enables all participants reached a consensus on the status of blockchain data information.

Proposed

- ▶ The Blockchain technology redefines the storage and dissemination methods of the information in the network. Neither participant needs to know each other, and nor does it require third-party certification bodies to participate.
- ▶ It records, transmits and stores transferring activities of the information value by distributed technology, ensures that data is not tampered and forged based on an asymmetric cryptographic algorithm, enables all participants reached a consensus on the status of blockchain data information.
- ▶ And from the current industry research on blockchain technology, it expounds the application of blockchain technology in identity authentication, data protection and network security.
- ▶ The Blockchain technology will be a great driving force in the process of information security technology change, and will have a far-reaching impact on the expansion of information security.

HARDWARE REQUIREMENTS

- ▶ Processor – Pentium -III
- ▶ Speed – 1.1 Ghz
- ▶ RAM – 256 MB(min)
- ▶ Hard Disk – 20 GB
- ▶ Floppy Drive – 1.44 MB
- ▶ Key Board – Standard Windows Keyboard
- ▶ Mouse – Two or Three Button Mouse
- ▶ Monitor – SVGA

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SOFTWARE REQUIREMENTS

- ▶ Operating System : Windows 8
- ▶ Front End : Java /DOTNET
- ▶ Database : Mysql/HEIDISQL

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Conclusion

- ▶ Block chain technology explains a new way of trading based on key technologies such as password security, decentralized coherence, shared public accounts and visibility of its proper controls and permissions.
- ▶ It can completely change the way our society produces and lives by registering and exchanging assets which are physical and virtual, tangible and intangible

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