BLOCKCHAIN BASICS — A PRACTICAL APPROACH

COMPATIBILITY & DIFFERENCE WITH BITCOIN CORE





COMPATIBILITY WITH BITCOIN CORE

- A key design principle of MultiChain is maximal compatibility with <u>Bitcoin Core</u>, the reference client for the bitcoin network. As a fork of Bitcoin Core, MultiChain shares the following technical characteristics:
 - Command-line arguments which affect how MultiChain is run see <u>running bitcoin</u>.
 - Network protocol which defines how MultiChain nodes communicate with each other
 see bitcoin protocol.
 - JSON-RPC API which provides a way for external software to control MultiChain see <u>bitcoin API</u>.
 - Transaction format which defines the meaning of the raw bytes in a transaction –
 see <u>bitcoin transactions</u>.
 - Script language which provides the rules for determining whether an output can be spent – see <u>bitcoin scripts</u>.
 - Block format which defines the meaning of the raw bytes in a block and its header –
 see <u>bitcoin blocks</u>.
 - As a result, the vast majority of the information in the <u>Bitcoin Developer</u>
 <u>Documentation</u> is applicable to MultiChain.

Ref: multichain.com





IS IT GOOD OR BAD?

- Its good. Infact very very good.
- Your knowledge of Bitcoin will be used to build applications with MultiChain
- Bitcoin community is large enough. So configuring the MultiChain will be easy because you have large community to support your development & answer your queries.
- Any modification to the MultiChain's core will be aligned strictly with Bitcoin giving you
 more freedom to build applications on MultiChain without worrying about its stability.





DIFFERENCE FROM BITCOIN CORE

- To support additional features like Multiple Network, custom parameters, permissions
 & streams etc. It slightly differ from Bitcoin Code. There changes are
 - Additional <u>runtime parameters</u> that can be used on the command line or in a node's per-chain config file.
 - Permissions management transactions (use OP_DROP metadata in transaction outputs).
 - Native asset transactions (use OP_DROP and OP_RETURN metadata).
 - <u>Data stream</u> transactions (use OP_DROP and OP_RETURN metadata).
 - Extensions to the <u>raw transactions</u> APIs to support MultiChain-specific metadata and more.
 - The <u>format of addresses and private keys</u> which differs slightly from bitcoin's scheme.
 - Mining and block signatures (use OP_RETURN in coinbase transaction).
 - Extended <u>peer-to-peer handshaking</u> to include node identification.

Ref: multichain.com







IS IT GOOD OR BAD?

- Its neither good nor bad.
- To overcome the issues in Bitcoin Core it had to be modified.
- To give something additional in Bitcoin Core it had to be modified.
- Give you straight forward methods to use it as a time-based, append only decentralized Database. Pretty cool isn't it?



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THANK YOU FOR YOUR TIME

