



Bitcoin Hyper Technology Highlights

Overview:

Bitcoin Hyper employs the globally accepted Bitcoin Core technology and security algorithms including Elliptical Curve Digital Signature *Algorithm*, or ECDSA and Murmur3. During the creation of Bitcoin Hyper we designed the project to maintain the original Bitcoin ideals and the community aspects while enhancing a version to adapt to real world transactional uses. Bitcoin Hyper was designed to incorporate the updated technology advancements and facilitate the needs of the transaction processing industry.

Integration:

Bitcoin Hyper's integration is nearly identical to integrating the original Bitcoin. For simplified integration Bitcoin Hyper will provide a script for installation. We recommend implementing the Oracle Exadata platform solution for a low latency solution. Bitcoin Hyper will provide at its own expense the Oracle Exadata hardware to qualified Exchanges on a case by case basis.

Block Size:

Bitcoin Hyper employs 64 MB blocks vs. 1-2MB for Original Bitcoin and 16MB for Bitcoin Cash. Bitcoin Hyper changed the block size implementation to take advantage of the evolution of high speed bandwidth and memory capacity. At the time of the Bitcoin Core software development high speed access was available on a limited basis and the cost factor at that time made it unfeasible for universal deployment. More recently, the Internet bandwidth market has significantly changed lowering prices and increasing access availability across the globe. With this fact in mind, Bitcoin Hyper implemented 64MB blocks to address the need for capacity and scalability changing the real world use for crypto currency transactions. The capacity increase allows for more transactions to be processed in a single block increasing our overall transactions per second versus the original code.

Block Spacing:

Bitcoin Hyper has enhanced the code for block spacing from the Original Bitcoin. Bitcoin Hyper's blocks are spaced 2 seconds apart. To counter effect the low speed transaction processing times and security issues caused by block delays we increased the speed to allow blocks to be issued and processed within the 2 second scope of time. This benefit was due to the significant memory and hardware advances that have been achieved over the last decade (from the launch of the original code).

Target Time:

The target times employed by the Bitcoin Hyper network solve the issue of the block spacing requirements while keeping the scope of security in mind, ensuring the blocks are available for network requests and high volume transactions. The specific amount of blocks issued within the time parameter address the capacity and scalability needs while creating a security barrier from reorganization attempts.



Difficulty:

Taking into consideration the block spacing and target times creating a new level of security, Bitcoin Hyper was able to reduce the difficulty to enable Bitcoin Hyper to conduct transactions within the scope of time required by the Credit Card Payments Association and the physical time parameters set by merchant processor terminals and the merchant processors transaction processing switches. Most terminals time out at 25 seconds well within the processing time of Bitcoin Hyper's average transaction time of a low to mid-range complexity transaction. In order to achieve network wide consistency we have deployed the code to remain at a constant difficulty level allowing node to process the transactions within the required scope of time.

Checkpoints:

Bitcoin Hyper believes checkpoints still play a vital and significant role in blockchain security. With checkpoints, the hard verification of the blockchain when a new node is established plays a key factor in securing the previous transactions and safeguarding the history of the blockchain from a bad actors attempt to reorg the blockchain and change transactions. Bitcoin Hyper has made a commitment in the short term to continue the checkpoint implementation on a regular basis to safeguard the Bitcoin Hyper owner's blockchain transactions and participants node integrity.

Network:

Our network employs the Oracle Exadata and Exalogic purpose built platform to create a robust node platform for executing transactions. Bitcoin Hyper has deployed a 6 node Global network with locations in Singapore, Los Angeles, Las Vegas, West Palm Beach, London and Frankfurt, Germany to offer global consensus and transaction support. The network uses High-Speed Cisco Catalyst switches with priority packet switching to enhance the speed of the network. Our interconnects utilize carrier grade interconnects and OSPF routing enhancements to circumvent public nodes that are notorious for causing congestion, dropped packets and added latency. These elements are the attributes of a world class processing network designed to create a reliable network that can be trusted when conducting a transaction.

51% and Decentralization:

Bitcoin Hyper was built with the commitment to excellence and operating within the framework of decentralization. The Bitcoin Hyper community project is designed whereas any group of participants can decide and deploy updated source code to change elements and parameters in the project so long as they have the majority participant consensus to apply the changes.



Technology and Protocol:

Our technology and protocol are the elements that set apart Bitcoin Hyper's network from the other cryptocurrency networks. The source code has been tuned and designed to operate taking advantage of latest hardware resources, including high capacity memory, high-end processing power, and high capacity bus systems and I/O ports to handle the high demand requirements needed by transaction processing. The network was built ground up with purpose built hardware that is the gold standard in the core of financial transaction processing networks that are trusted, tried and true. Our set of rules are the foundation of the Bitcoin Hyper project, when all fabrics are woven together create the most advanced decentralize crypto currency network to date. The technology implementation utilizes resources that were not available at the inception of Bitcoin and may have been cost restrictive during the implementation of more recent networks. From an analytical point of view the disaster recovery, robust hardware and low latency transaction speeds create an unparalleled cryptocurrency project for real world use.