



Blockchain - State of POCs

Description

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By now, this may be the 100th time you are hearing the word "Blockchain" within a week. There are scores of organizations that are trying to build Proofs-Of-Concept (POC) across diverse domains. But among all these, still, there are questions being raised on the scalability of Blockchain technologies.

Challenges with Current Blockchain Technologies

The biggest challenge with the current Blockchain technologies is transaction speed. You can say that this is the only reason for Blockchain technologies not going mainstream. But how much of these transaction speeds affect your plans? Is there a way out? Is it possible that you can continue working on POCs without worrying whether you can take it mainstream?

Do transaction speeds affect your POC?

Yes, if you are building a Dapp on the "Main Ethereum Network" and if you plan to use ethers (Cryptocurrency of Ethereum) as part of your functionality. Transaction speeds depend on a few factors like block size, block time, transaction traffic, and transaction fees (Gas), etc.

"Ethereum has a block size limit due to the block gas limit enforced by the consensus protocol. The block gas limit is dynamically adjusted by miners. In each block, miners can increase or decrease the block size by a maximum of the previous block size divided by 1024."

So, it is next to impossible for any changes to take place in the way blocks are added to Blockchain currently. Even if someone wants to change, there are other complications. There are efforts to find a way out. There is Lightning Network among others. So, if you are currently building a PoC on the main

Ethereum chain then you should think it over.

Ethereum Private Consortium

If you have been working on PoCs around private Ethereum blockchain either on Azure Cloud (Azure provides templates to spin private consortium) or an in-house chain, then you are at least safe from transaction speeds. From a scalability point-of-view, you can always add more nodes to your network and also deploy your Dapp based on your Peer network. In this sense, you can have multiple deployments of Dapp connecting to the nearest Blockchain node and then redirect users accordingly. The consensus logic, either Proof-of-Work or Proof-of-Stake, also doesn't really affect your Dapp.

Ethereum Blockchain Vs Hyperledger

I have come across this argument multiple times. Also, there is an argument on 'Permissioned' & 'Permissionless'. If you are building a Dapp on public Ethereum Blockchain then it is 'Permissionless' but if you are setting up your own private consortium then it is, in the way a, 'Permissioned'. You cannot really compare a Public Ethereum Blockchain to a Hyperledger. The only big difference between a Hyperledger and a PRIVATE Ethereum Blockchain is that Hyperledger doesn't have any provision for Cryptocurrency. Both of them differ on consensus mechanism and a few other aspects. So, if you are building an enterprise Dapp then you have a choice of using either Hyperledger or Private Ethereum Blockchain.

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