

Exam : CBDH

Title: BTA Certified Blockchain

Developer – Hyperledger

Version: DEMO

- 1.Level DB is the default database for Hyperledger Fabric and is particularly appropriate when ledger states comprise what type of data?
- A. Complex key-value pairs
- B. Rich Queries
- C. JSON data pairs
- D. Simple key-value pairs

Answer: D Explanation:

Simple key-value pairs - LevelDB is the default and is particularly appropriate when ledger states are simple key-value pairs. A LevelDB database is closely co-located with a network node – it is embedded within the same operating system process. CouchDB is a particularly appropriate choice when ledger states are structured as JSON documents because CouchDB supports the rich queries and update of richer data types often found in business transactions. Implementation-wise, CouchDB runs in a separate operating system process, but there is still a 1:1 relation between a network node and a CouchDB instance. All of this is invisible to chaincode.

Reference: https://hyperledger-fabric.readthedocs.io/en/release-1.3/ledger/ledger.html

- 2. When creating a network according to an organization's structure and also bootstrap a channel what are the following artifacts we would need to generate?
- A. Genesis Block, License File and Anchor Peer Configs for each organization.
- B. Genesis Block, ledger Configuration and Anchor Peer Configs for each organization.
- C. Genesis Block, Channel Configuration and Anchor Peer Configs for each organization.
- D. Genesis Block, Channel Configuration and Anchor MSP Configs for each organization.

Answer: C Explanation:

To create a network according to an organization's structure, and to bootstrap a channel, we will need to generate the following artifacts: A genesis block, containing organization-specific certificates that serve to initialize the Fabric blockchain. Channel configuration information. Anchor peer configurations for each organization. An anchor peer serves as a fulcrum within an organization, for cross-organization ledger syncing using the Fabric gossip protocol.

- 3. Which Hyperledger tool would you select to invoke, deploy or query blocks, transactions and associated data, network information (name, status, list of nodes), chain codes and transaction families, as well as other relevant information stored in the ledger?
- A. Hyperledger Quilt
- B. Hyperledger Cello
- C. Hyperledger Caliper
- D. Hyperledger Explorer

Answer: D

## **Explanation:**

Hyperledger explorer: Hyperledger explorer, which was originally contributed by IBM, Intel, and DTCC, can view, invoke, deploy or query blocks, transactions and associated data, network information (name, status, list of nodes), chain codes and transaction families, as well as other relevant information stored in the ledger.

4. Blockchain services consists of three major components.

What are they? (Select three.)

- A. Consensus Manager
- B. Distributed Ledger
- C. Peer to Peer Protocol
- D. Reputation Manager
- E. Membership Services

## Answer: ABC Explanation:

- 1. P2P Protocol is implemented over HTTP/2 standards and uses Google RPC.. P2P components define messages used by peer nodes, from point to multicast.
- 2. Distributed Ledger manages the world state and the transaction log in the blockchain.
- 3. Consensus Manager defines the interface between the consensus algorithm and the other Hyperledger components.
- 5. The gossip data dissemination protocol performs which three functions? (Choose three.)
- A. Manages peer discovery and channel membership
- B. Disseminates ledger data across all peers on the channel
- C. Manages channel membership only
- D. Sync ledger state across all peers on any channel
- E. Sync ledger state across all peers on the channel
- F. Manages peer discovery only

## Answer: ABE Explanation:

Gossip Protocol The gossip data dissemination protocol performs three functions Manages peer discovery and channel membership Disseminates ledger data across all peers on the channel Syncs ledger state across all peers on the channel.

Reference: https://hyperledger-fabric.readthedocs.io/en/v1.1.0-alpha/gossip.html