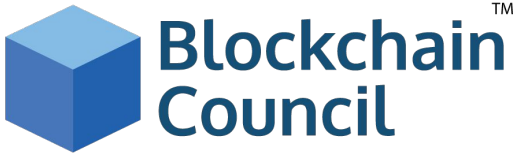


Certified Hyperledger Expert

What is Hyperledger Composer?

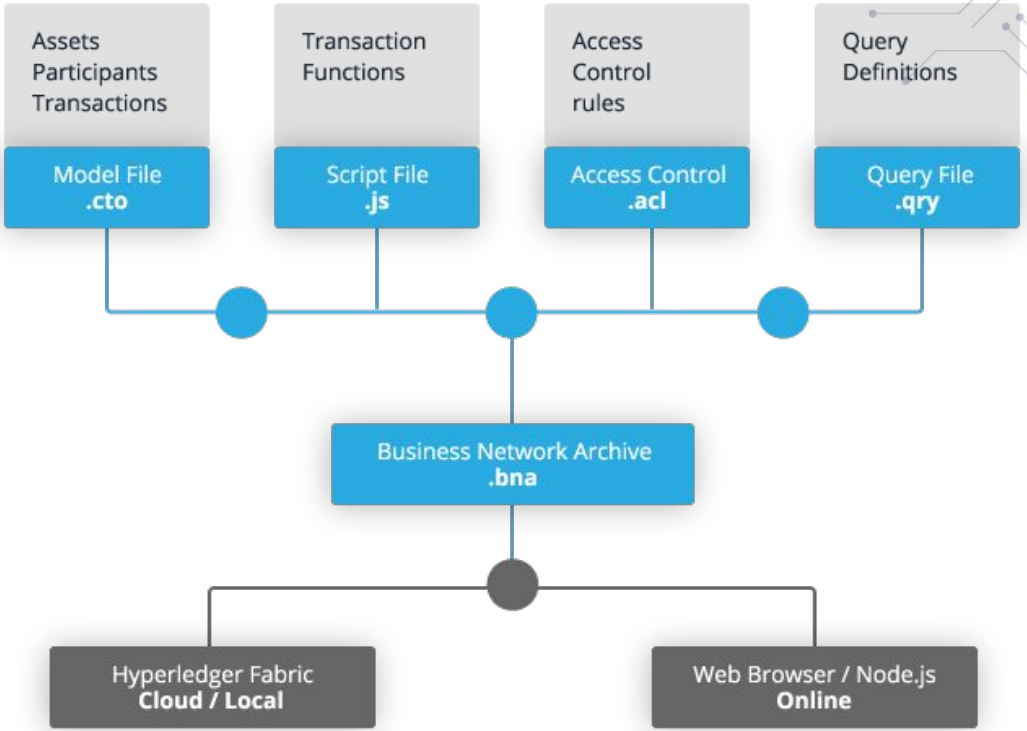
Basic Introduction

- Hyperledger Composer is an application development framework which simplifies and expedites the creation of Hyperledger fabric blockchain applications.
- Composer allows you to model your business network and integrate existing systems and data with your blockchain applications.
- Composer supports existing Hyperledger Fabric infrastructure and runtime like pluggable blockchain consensus protocols to ensure that transactions are validated according to network policy.

Architecture of Hyperledger Composer

- Hyperledger Composer is a programming model containing a modeling language, and a set of APIs to quickly define and deploy business networks and applications that allow participants to send transactions that exchange assets.
- Hyperledger Composer consists of:
  - a modeling language called CTO
  - a user interface called Hyperledger Composer Playground for rapid configuration, deployment, and testing
  - a command-Line Interface (CLI) tools for integrating business networks modeled using Hyperledger Composer

Architecture of Hyperledger Composer



Some basic network concepts

- Blockchain State Storage
- Connection Profiles
- Assets
- Business Network cards
- Transactions
- Queries
- Events
- Access Control

Modeling language

- Hyperledger Composer has its own modeling language (called CTO) used to model the business network.
- The model for your business network resides in a file that has a.cto file extension, and contains definitions for the following elements:
  - Namespace
  - Resources
  - Imports from other namespaces, as require
- If you have a large model, then you can have multiple .cto model files, as necessary. Every **.cto** model file must include a single namespace and at least one resource definition.

Composer Playground

- Playground provides an environment to quickly build and test blockchain business networks.
- It doesn't need a running blockchain network, and so it reduces the complexity of getting a business network defined, validated, and tested.
- It is a browser-based interface which you can use to model your business network.
- It uses browser's local storage to simulate the blockchain network's state storage, which means one don't need to run a real validating peer network to use Playground.
- It includes what items of value (assets) are exchanged, who participates (participants) in their exchange, how access is secured (access control), what business logic (transactions) is involved in the process, and more.

THANK YOU!

Any questions?

You can mail us at

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