Blockchain as a Service

Development Guide

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Hyperledger Fabric

Dapp Management

Connection Profile

After download SDK configuration file and extract the zip file, you can find Fabric connection profiles in there. Each connection profile file contains all information that you needed to connect to the Fabric blockchain, there are six sections in profile: client,organizations, channels,peers,orderers,certificateAuthorities.

- client: The profile for a Fabric client, contains MspID,BCCSP,cryptoStore etc.
- Organizations: Describe all the information about the organizations in this network. Like the MspID of the organization, the peers/CAs in this organization, etc.
- channels: Describe all information about the channels in this network. Like the peers in this channel, the role of each peer play. Also contains the orderers's information there.
- peers: Describe each peer's detail. Like the URL, TLS certification, domain and eventhub URL.
- orderers: Describe each orderer's detail. Like orderer's URL, TLS certification, domain.
- certificateAuthorities: Describe the CA which belong to client, those CA which do not belong to this client not shown here. This section contains CA's URL, TLS certification and name.

Private key and certification management

To ensure a secure blockchain network, BaaS provides private key hosting services for the organization administrator. You can perform ADMIN user operations, such as uploading, upgrading or instantiating a chaincode, or creating a channel in the Alibaba Cloud BaaS console.

In general, Dapp uses the MEMBER user which can perform invoke/query chaincode. To generate

the private key and enroll from a Fabric CA you can use the Fabric SDK. After enrollment the private key and certification will on you server, be sure to keep your private key secure. The private key storage path is specified by client.credentialsStore.crytoStore.path in connection profile, which the default value is /tmp/msp.

Upgrade Dapp

Since Dapp is a program, we suggest to follow the best pratice of developing. Do code review and full tests before upgrade the Dapp in production environment. A upgrading of Dapp contains two step:

1. Upgrade the chaincode. You can find more information about how to upgrade chaincode from BaaS console.
2. Upgrade the Dapp. This step depends on you, like update the asserts on CDN for you app.