

Coreum Technical Tasks

A)

Let's say we want to implement a currency conversion grpc microservice.

1. Prepare .proto file with grpc service & message type definitions (no implementation required). Describe service methods to perform conversion, batch conversion, listing of rates with pagination.
2. To perform conversion fast we want to store live exchange rates in local memory and sync them with some external source via API e.g ([Coingecko API](#) or [CurrencyLayer](#)). Implement part of exchange rates sync between external API and local memory (concurrency should be handled). Also define an interface which provider should implement to fetch live rates suitable for different providers (Coingecko/CurrencyLayer etc)

B)

Prepare high level (without much technical details) Cosmos SDK module design in form of documentation for business requirements mentioned onwards. You can use a structure similar to the standard [Cosmos module structure](#). Important parts to be included are: State, Keepers, Messages and any other if required.

Business requirements

- As XYZ token minter I want to have the ability to freeze XYZ tokens on any account. Frozen tokens can't be moved outside of account in any way unless unfrozen.
- As XYZ token minter I want to have the ability to unfreeze XYZ token on any account.