

createSignatureRequest() Flow

Create Clone of TransactionProcessor Object

clone = transactionProcessor.getDeepClone()

Iterate over list of Actions from the Clone in clone.transaction.actions

Get ABI by calling ABIProviderImpl.getABI(clone.transaction.actions[i].action.contractName)

See ABIProviderImpl.getABI() Flow

Create Data for Action object by calling SerializationProviderImpl.serialize(abiEosSerializationObject: AbiEosSerializationObject)

The JSON object obtained from the previous step is added to a new AbiEosSerializationObject along with values for the "contract", "name", "type", "jsonObject", "abi", and "isReorderable":  
Example:  
AbiEosSerializationObject  
- jsonObject: String <---- This is the ActionData.jsonObject.toString()  
- hex: String <----- Set to NULL  
- contract: String <---- Set to "eosio.token" (From Action.account)  
- abiMap: Map<String, Object>  
- abi: String <----- Set to string version of JSON object from previous step  
- isReorderable: Boolean <-- Set to True  
- name: String <---- Set to "transfer" (From Action.name)  
- type: String <----- Set to NULL

Now set Action.data equal to abiEosSerializationObject.hex that was returned from the AbiEosSerializationObject in the previous step.

More Actions ?

Yes

Create AbiEosSerializationObject using JSONObject from transactionProcessor.transaction.toJSON()

Example:  
AbiEosSerializationObject  
- jsonObject: String <----- Set to JSONObject  
- hex: String <----- Set to NULL  
- contract: String <---- Set to NULL  
- abiMap: Map<String, Object>  
- abi: String <----- Set to "transaction.abi.json"  
- isReorderable: Boolean <----- Set to False  
- name: String <---- Set to ""  
- type: String <----- Set to "transaction"

CHANGE: serializeTransaction(json: String)

Convert JSON object to Hex using SerializationProviderImpl.serialize(abiEosSerializationObject: AbiEosSerializationObject)

Get Serialized Transaction from abiEosSerialization

Create EosioTransactionSignatureRequest Object

Set EosioTransactionSignatureRequest.serializedTransaction to Serialized Transaction value from previous step.  
Set EosioTransactionSignatureRequest.chainId to GetInfoResponse.chainId.

Is TransactionProcessor.requiredKeys empty ?

Is TransactionProcessor.availableKeys empty ?

Yes

Get Available Signing Keys from Signature Provider

Call SignatureProviderImpl.getAvailableKeys() to obtain a List<EOS formatted keys>

No

Create GetRequiredKeysRequest Object

Set getRequiredKeysRequest.availableKeys to the List<EOS formatted keys> obtained in the previous step  
Set getRequiredKeysRequest.transaction to transactionProcessor.transaction.toJSON()

Subset of keys returned in GetRequiredKeysResponse.requiredKeys ?

Throw Exception

STOP

Add EOS formatted required keys to the EosioTransactionSignatureRequest Object

Set EosioTransactionSignatureRequest.signingPublicKeys = GetRequiredKeysResponse.requiredKeys

Return EosioTransactionSignatureRequest

EosioTransactionSignatureRequest will be passed to the TransactionProcessor.getSignatures() call

STOP

No