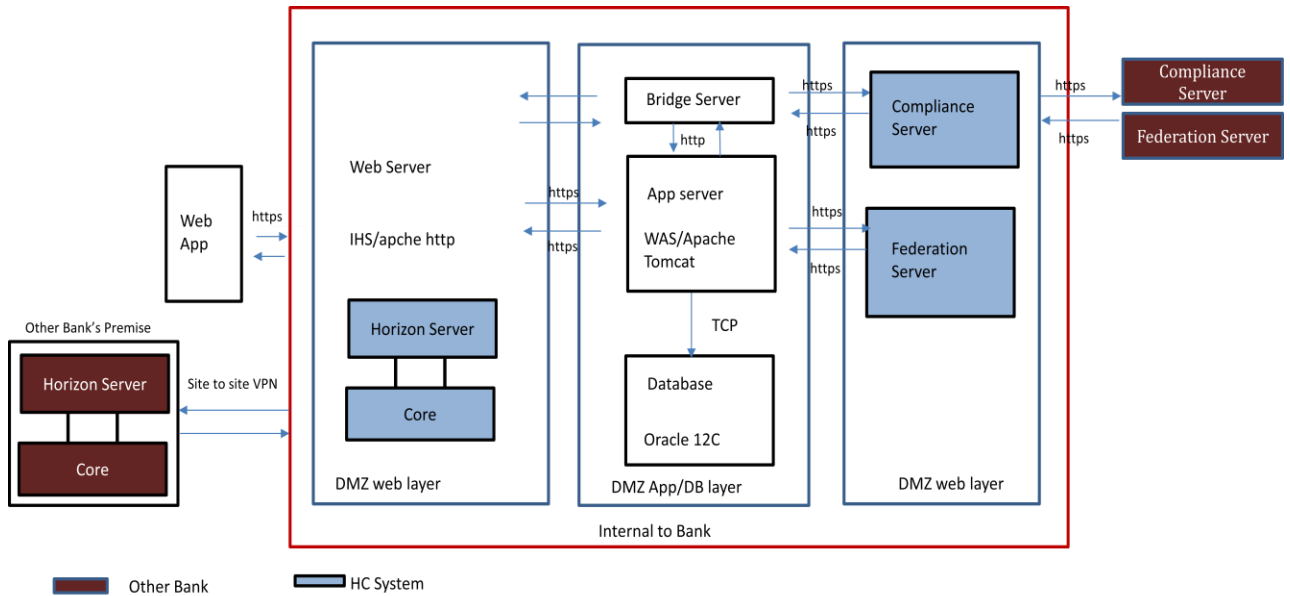# HC NET PRODUCT FAMILY

Introduction

The HC Net Product Family is a blockchain powered platform that manages remittance, cross border corporate payments, market making and commerce.

CORE ARCHITECTURE

Readily Available APIs
Fund Transfer By Submitting to Horizon

Title	Fund Transfer			
Method	**Rest**			
Data Params	**Field Name**	**Field Type**	**Description**	**Compulsion**
	Asset Code	String	The asset_code which will be transferred.	Mandatory
	From Account Private Key	String	The private key of the sending bank	Mandatory
	To Account Private Key	String		Mandatory
	To Account Public Key	String	Public key of receiving bank	Mandatory
	Issuing Account Private Key	String	Private key of Issuing account private key of	Mandatory
	Amount	String	Amount to be sent	Mandatory
	Is Test Request	String	Default Value 1	Mandatory
	Memo	String	The memo returned while calling federation API	Mandatory
URL Programs				
Success Response	**Code**		**Content**	
	1		{"Status Code":"1","Message":"Fund transferred failed"}	
Notes	From Account Private Key & Issuing Account Private Key will be maintained in property file To Account Public Key is the account ID returned while calling federation service.			

Fund Transfer via Bridge Server

Title	Fund Transfer			
Method	Rest			
Data Parameter	**Field Name**	**Field Type**	**Description**	**Compulsion**
	Asset Code	String	Asset code transferred	Mandatory
	Asset Issuer	String	Public key of sending bank	Mandatory
	Destination	String	Friendly id	Mandatory
	Sender	String	Friendly id	Mandatory
	Amount	String	Amount to be sent	Mandatory
	Extra Amount	String	Need to be sent	Mandatory
URL Params	NA			
Success Response	**Code**	**Content**		
	0	{"hash":"12f9f2cfa946da4a6f6631e0a218cf1aa3c20166b627a0f24e9bd785466baa19","result_xdr":"AAAAAAAAGQAAAAAAAAQAAAAAAAAABAAAAAAAAAA=","ledger":"3436493","code":null,"message":null,"memo":"HRBuR0Kv6zMhUSBmsjyHrbD3E+6ZrPJrTg6X0xxzXDg="}		
Error Response	1	{"hash":null,"result_xdr":null,"ledger":null,"code":"1","message":"Internal Server Error, please try again.", "memo": null}		
Notes	Asset Issuer will be maintained in DB			

Get Balance - Shows the Balance as per the currency

Title	Get Balance			
Method				
Data Params	**Field Name**	**Field Type**	**Description**	
	Account Public Key	String	The public key of the account which were trying to fetch the balance	Mandatory
	Is Test Request	String	Always 1	Mandatory
URL Programs	N/A			
Success Response	**Code**	**Content**		
	0	{"statusCode":"0","message":"Returning Balance","balances":[{"balance":"1953.3400000","asset_type":"credit_alphanum4","asset_code":"INR","asset_issuer":"GAOTUOAG3UQHVKD4MDZ3O7XQ3PGEE5V4I5UHVAAK6TK56H7FKGMLHPB6"},{"balance":"10.0000000","asset_type":"credit_alphanum12","asset_code":"AstroDollar","asset_issuer":"GBRPKRO3IE6FOCW53XV5EJRK75UT3HW2LMAG7R3H6HAGXJ3EGHZNL63N"},{"balance":"48.0000000","asset_type":"credit_alphanum4","asset_code":"INR","asset_issuer":"GBQGTGGZVWGNXLATQMDQUAKQKBAT6Q7IKKIGTSHRSSYUNQUQYDXBMLTG"},{"balance":"24.0000000","asset_type":"credit_alphanum4","asset_code":"AED","asset_issuer":"GBQGTGGZVWGNXLATQMDQUAKQKBAT6Q7IKKIGTSHRSSYUNQUQYDXBMLTG"},{"balance":"35.0000000","asset_type":"credit_alphanum4","asset_code":"AED","asset_issuer":"GAOTUOAG3UQHVKD4MDZ3O7XQ3PGEE5V4I5UHVAAK6TK56H7FKGMLHPB6"},{"balance":"9999.9996100","asset_type":"native","asset_code":null,"asset_issuer":null}]}		
Error Response	**Code**	**Content**		
	1	statusCode":"1","message":"Get Balance failed!","balances":null		
Notes	Show Balance as per the currency			

Prefunding

Title	Prefunding			
Method	**Rest**			
Data Params	**Field Name**	**Field Type**	**Description**	**Compulsion**
	Asset Code	String	Asset code of the bank prefunding	Mandatory
	From Account Private Key	String	Private key of sending bank	Mandatory
	Memo	String	Any memo/remarks	Mandatory
URL Params	**NA**			
Success Response	**Code**	**Content**		
	0	{"StatusCode":"0","Message":"Fund transferred successfully"}		
Error Response	**Code**	**Content**		
	1	{"StatusCode":"1","Message":"Fund transferred failed"}		
Notes	From Account Private Key and Issuing Account Private Key is maintained in property file To Account Public Key is maintained in database To Account Public Keys should be fetched by passing bank name where account is prefunded			

Federation

Title	Federation			
URL	**Service/federation**			
Method	**Rest**			
Data Params	**Field Name**	**Field Type**	**Description**	**Compulsion**
	Name	String	ID	Mandatory
	Domain	String	Domain of the beneficiary bank	Mandatory
URL Params	**NA**			
Success Response	**Code**	**Content**		
		{"Address":"tunde*hashcashconsultants.com","accountId":"GD6WU64OEP5C4LRBH 6NK3MHYIA2ADN6K6II6EXPNVUR3ERBXT4AN4ACD","memoType":"text","memo":"Tunde Abayo-the ICICI bank-Uganda"}		
Error Response	**Code**	**Content**		
		{"Address":"Not Found"," account Id":"Not Found ","memo Type":"Not Found" ,"memo":"Not Found"}		
Notes	Name maintained in db is tune d and domain is hashcashconsultants.com Hence returning record			

Registration

Title	Registration			
URL	Service/Registration			
Method	Rest			
Data Params	Field Name	Field Type	Description	Compulsion
	Id	String	Stellar id provided	Mandatory
	User id	int	Unique key	Mandatory
	Full Name	String	Full name during signup	mandatory
URL Params	NA			
Success Response	Code	Content		
	0	{"Status Code":0", "message":"Record inserted successfully"}		
Error Response	Code	Content		
	1	{"Status Code":1", "message":"Record inserted successfully"}		

KYC Details

Title	KYC Details			
URL	Service Key/kyc			
Method	Rest			
Data Params	Field Name	Field Type	Description	Compulsion
	Transaction_hash	String	The Hash of transaction returned while doing fund transfer	Mandatory
	Ledger	String	The ledger id returned while doing fund transfer	Mandatory
	Memo	String	Memo returned while doing fund transfer	Mandatory
URL Parameters	NA			
Success Response	Code	Content		
		Following value will be returned in form of json: sender_addr; receiver_addr; sender_city; receiver_city; sender_dob; sender_fullname; sender_province;		
Error Response	Code	Content		
		Above Object will be null		