

# API Format

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## API format

Two type of API will be documented following.

- [Wallet Manager API](#)

The API provide by Wallet Manager to receive instructs from merchant. eg. [get address](#), [withdraw](#).

- [Merchant API](#)

The API provided at merchant side to receive callbacks. eg. [deposit](#) and [withdraw status](#).

Both APIs are using same signing mechanism to protest messages being sent not be forged.

## Request

Headers are added in request to verify message. Every program is assigned an address in Ethereum format for identification. It's the program's responsibilities to protect its private key. All messages should be signed before sending out to other program.

5 additional HTTP headers added.

RESTful Request				
Field	Subfield	Type	Optional	Comments
HEADER	X-Message-Address	String		An Ethereum address use to identify the sender 0x8F9092CE573e41d72378Cf8c9d3335584e6843F1
	X-Message-Timestamp	Long		Timestamp of the message sent
	X-Message-Session	String		Snowflake ID generated at program startup.
	X-Message-Sequence	String		Sequence of message in this session.
	X-Message-Signature	String		ECDSA_Sign(HSA265(X-Message-Timestamp#X-Message-Session#X-Message-Sequence#BODY)) Using secp256k1 curve 0x26f868e265605a41c7dae3ee5a5ef6ab03907be1e0930ac1ecc7023db01476ae30ba33429d5a5975382cccf759c735f21c83949d1ccc39d26875426b4faae371c
Method		String		GET/POST/PUT/DELETE
Path parameter			Y	
Body		Json	Y	

## Response

Response JSON Message (Similar to the response JSON RPC 2.0)				
<a href="#">JSON-RPC 2.0 Specification</a>				
Field	Subfield	Type	Default	Comments
HTTP STATUS	HTTP STATUS	Number	200	
result		Object		This member is REQUIRED on success. This member MUST NOT exist if there was an error invoking the method. The value of this member is determined by the method invoked on the Server.errorThis member is REQUIRED on error. This member MUST NOT exist if there was no error triggered during invocation. The value for this member MUST be an Object.

error	code	Integer		A Number that indicates the error type that occurred. This MUST be an integer.
	message	String		A String providing a short description of the error. The message SHOULD be limited to a concise single sentence.
	data	Any		A Primitive or Structured value that contains additional information about the error. This may be omitted. The value of this member is defined by the Server (e.g. detailed error information, nested errors etc.).