

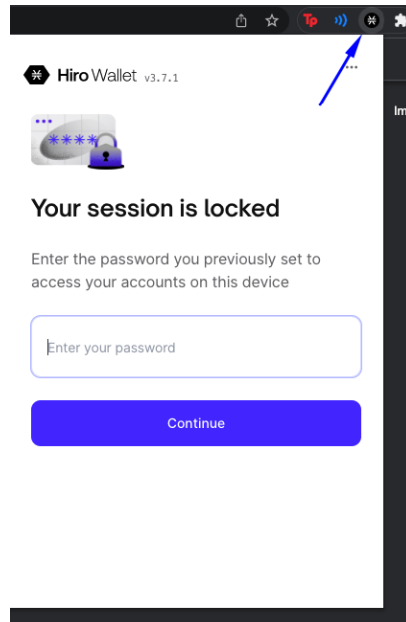


# THE STACKS PLUG-IN V2

<b>Version</b>	<b>Last update:</b>
1.0	Jul 5, 2022

## Before use:

Before using The Stacks Plug-in V2, make sure you have installed the Hiro wallet extension into your browser. It is also recommended to use Chrome browser.



*Illustration 1 - Hiro Wallet Chrome Extension*

## Server-side Actions

### Login (v2)

Logs in the user into his Wallet.

#### Fields

- **Password:** User's password to login into Hiro Wallet
- **Secret Key:** User's Secret Key
- **Network:** Testnet or Mainnet network for getting credentials

#### Returned Values

- **Accounts List:** A list of accounts generated by this wallet
- **STX Private Keys:** The private key used for STX payments

### Sign up (v2)

Sign the user and create a user Wallet with 1 account.

#### Fields

- **Password:** User password

#### Returned Values

- **Secret Key:** 24 words used for login
- **Account:** First account of Wallet
- **Accounts List:** A list of accounts generated by this wallet
- **STX Private Key:** The private key used for STX payments

### New Account

#### Fields

- **Password:** User's password to login into Hiro Wallet
- **Secret Key:** User's Secret Key
- **Network:** Testnet or Mainnet network for getting credentials

#### Returned Values

- **New Account:** Newly generated account
- **Accounts List:** A list of accounts in this wallet
- **STX Private Key:** The private key used for STX payments

## Authenticate (v2)

Generate an auth request payload to pass to the authenticator.

### Fields

- **App domain:** The app domain is the URL to your website/app. This is how the Stacks authentication system identifies apps and determines what credentials to provide. Changing the app domain is equivalent to changing the app.

### Returned Values

- **Auth Request:** The resulting payload can now be passed to a compatible Stacks authenticator or browser extension.

## Transaction (v2)

Do a transaction in the name of the user

### Fields

- **Recipient:** the address of the recipient of the token transfer
- **Amount:** the amount to be transferred
- **Sender Key:** STX Private Key of Sender
- **Memo:** an arbitrary string to include in the transaction, must be less than 34 bytes
- **Network:** the network that the transaction will ultimately be broadcast to
- **Nonce:** the transaction nonce, which must be increased monotonically with each new transaction

### Returned Values

- **Response:** Broadcast Response
- **Raw Transaction:** Raw serialized transaction
- **Transaction ID:** The ID of the transaction just generated
- **Broadcast Status:** Result of Broadcast
- **Reject Reason:** Reason for rejection

## Smart Contract Deploy Transaction

Generates a Clarity smart contract deploy transaction

### Fields

- **STX Private Key:** STX Private Key of Sender
- **Contract Name:** Name of the contract
- **Body:** The Clarity code to be deployed

- **Network:** The network that the transaction will ultimately be broadcast to

#### Returned Values

- **Broadcast Response:** Transaction ID response

## Smart Contract Function Call

Generates a Clarity smart contract function call transaction

#### Fields

- **STX Private Key:** STX Private Key of Sender
- **Network:** The network that the transaction will ultimately be broadcast to
- **Post Condition Address:** the c32check address
- **Amount:** the amount of STX tokens
- **Contract Address:** The Stacks address of the contract
- **Contract Name:** Name of the contract
- **Function Name:** Name of the function

#### Returned Values

- **Broadcast Response:** Transaction ID response

## Elements

### Stacks

- **Open Authenticator:** If installed, it opens Hiro Authenticator. An auth request is expected from server-side call Authenticate

## API Calls

- **[Data Call] Get Transaction (testnet)**
  - Retrieves transaction details for a given transaction ID
- **[Data Call] Get Address Transactions (testnet)**
  - Retrieves total account balance information for a given Address or Contract Identifier. This includes the balances of STX Tokens, Fungible Tokens and Non-Fungible Tokens for the account.
- **[Data Call] Get Account Balances (testnet)**
  - Retrieves total account balance information for a given Address or Contract Identifier. This includes the balances of STX Tokens, Fungible Tokens and Non-Fungible Tokens for the account.
- **[Data Call] Get Account STX Balance (testnet)**
  - Retrieves STX token balance for a given Address or Contract Identifier
- **[Data Call] Get Account Transactions (testnet)**
  - Retrieves a list of all Transactions for a given Address or Contract Identifier
- **[Data Call] Get the latest nonce used (testnet)**
  - Retrieves the latest nonce values used by an account by inspecting the mempool, microblock transactions, and anchored transactions
- **[Action] Get STX tokens (testnet)**
  - Add 500 STX tokens to the specified testnet address. Testnet STX addresses begin with ST. If the stacking parameter is set to true, the faucet will add the required number of tokens for individual stacking to the specified testnet address.