Recover an Account

Help users regain access to their accounts when they forget their PIN code.Suggest Edits

Circle Programmable Wallets provide a comprehensive developer solution to storing, sending, and spending Web3 digital currencies and NFTs. You or your users can manage asset infrastructure. Circle provides a one-stop-shop experience with all the tools and services to handle the complex parts, including security, transaction monitoring, account recovery flows, and more.

This guide outlines how users can regain access to their account using their pre-set security questions in the event that they forget their original PIN code.

Users should be aware that the answers to their security questions are their responsibility to remember. No additional parties can help users regain access to a user-controlled wallet if their PIN code is lost and they cannot remember the answers to their security questions.

Caution : If a user loses both their PIN code and the answers to their Security Questions, they will be permanently locked out of their account, losing access to all of their wallets and assets.

1. Run Sample App

Once you have one of the web, iOS, or Android sample applications set up locally, you will then:

1. Run the sample app and simulator.
2. Obtain your App ID. This can be done by one of two options1. Access the developer console and navigate to the configurator
3. 1. within user-controlled wallets. From there, copy the App ID.
4. 1. Make an API request to GET /config/entity
5. 1. and copy the App ID from the response body.
6. Add the App ID to the sample app.

2. Acquire Session Token

Next, you will need to acquire a session token. Make a request to the POST /users/token using the previously created userId in Step 1. The userToken is a 60-minute session token used to initiate requests requiring a user challenge (PIN code entry). After 60 minutes, the session expires, and a new userToken must be generated via the same endpoint.

From this response, you will acquire the encryptionKey and userToken which you should provide in the respective fields in the sample app. Additionally, you will use the userToken in Step 2.

Node.js cURL // Import and configure the user-controlled wallet SDK const { initiateUserControlledWalletsClient } = require('@circle-fin/user-controlled-wallets'); const circleUserSdk = initiateUserControlledWalletsClient({ apiKey: '' });

const response = await circleUserSdk.createUserToken({ userId: '2f1dcb5e-312a-4b15-8240-abeffc0e3463' }); curl --request POST \ --url 'https://api.circle.com/v1/w3s/users/token' \ --header 'accept: application/json' \ --header 'content-type: application/json' \ --header 'authorization: Bearer ' \ --data ' { "userId": "2f1dcb5e-312a-4b15-8240-abeffc0e3463" } ' Response body { "data": { "userToken": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCC9.eyJkZXZlbG9wZXJFbnRpdHlFbnZpcm9ubWVudCI6IlRFU1QiLCJlbnRpdHlJZCI6IjRlMDdhOGM5LTlxOTAtNDVlNC1hNjc0LWQyMGFkNjg4MWI3YyIsImV4cCjUR8i4zMmfdURw3FFcQldSbm-BUg6M7FP_fp-cs9xBbNmRZa31gMd1aKdcajJ9SvlVrfUowYfGXM3VcNF8rtTFtW-gk1-KzU4u10U35XXbbMcW1moxE0Rqx_fKotDgk2VdITuuds5d5TiQzAXECqeCOCtNoDKktMkgltbnLxOaRl2ReZjGt-ctD2V0DbYNO4T_ndPSUDI6qD7dXQRed5uDcezJYoha3Qj3tFGBglEnox2Y6DWTbllqjwmfTGrU8Pr0yz4jQz7suGwmiCzHPxcpYxMzYQ", "encryptionKey": "Tlcyxz7Ts9ztRLQq5+pic0MIETblYimOo2d7idV/UFM=" } }

3. Initialize Account Recovery and Acquire a Challenge ID

Make a request to POST /user/pin/restore using the userToken returned from Step 1. This call returns a challengeId , which is used with the Circle Programmable Wallet SDK to have the user reset their PIN code.

Node.js cURL const response = await circleUserSdk.restoreUserPin({ userToken: '' }); curl --request POST \ --url 'https://api.circle.com/v1/w3s/user/pin/restore' \ --header 'accept: application/json' \ --header 'content-type: application/json' \ --header 'authorization: Bearer ' \ --header 'X-User-Token: ' \ --data ' { "idempotencyKey": "bb3d64d9-d421-41c7-aae2-84fc4732be2f" } ' JSON { "data": { "challengeId": "c4d1da72-111e-4d52-bdbf-2e74a2d803d5" } }

4. Recover Account in the Sample App

Using the sample application, enter the userToken and secretKey returned from Step 1. Enter the challengeId returned from Step 2.

At this point, you should be ready to execute the account recovery workflow through the Circle Programmable Wallet SDK. Once you've entered the required fields indicated in Step 3, clickExecute to continue.

The sample application takes you through the account recovery process by answering your Security Questions. If answered correctly, the sample application prompts you to enter a new PIN code.

5. Check the Challenge Status

Make a request to GET /user/challenges/{id} using the challengeId received from Step 2 to retrieve the status of the challenge. Additionally, Circle sends a notification to a subscribed endpoint once the account recovery process is complete. For a full list of possible statuses , see the Asynchronous States and Statuses guide .

Node.js cURL const response = await circleUserSdk.getUserChallenge({ userToken: '' }); curl --request GET \ --url 'https://api.circle.com/v1/w3s//user/challenges/{id}' \ --header 'accept: application/json' \ --header 'content-type: application/json' \ --header 'authorization: Bearer ' \ --header 'X-User-Token: ' Response Body { "data": { "challenge": { "id": "c4d1da72-111e-4d52-bdbf-2e74a2d803d5", "correlationIds": ["54399e5a-1bf6-4921-9559-10c1115678cd"], "status": "COMPLETED", "type": "RESTORE_PIN" } } } Updated16 days ago

What's Next The user has now successfully recovered their account and set a new PIN code! That's it for the User Controlled Wallet Quickstarts! May we suggest the following resources:Supported Blockchains and Currencies * Blockchain Confirmations * Wallet Security * Table of Contents * * 1. Run Sample App * * 2. Acquire Session Token * * 3. Initialize Account Recovery and Acquire a Challenge ID * * 4. Recover Account in the Sample App * * 5. Check the Challenge Status