

Zcash Web Wallet Test Scenarios

Account Management

- User can generate a new Zcash account
- User can restore an account from a seed phrase
- User can provide the account's "birthday" (the date from which that account should be synced)
- User can import existing HD wallets
- User can see proper address derivation following ZIP-32
- User can see validation feedback for incorrect recovery phrases
- User can see appropriate security warnings during wallet creation/recovery

Balance and Transaction Management

- User can view the balance for an account, including:
 - Unshielded balance
 - Shielded balance, split between Orchard and Sapling pools
- User can view the list of transactions for an account, including:
 - Sender information
 - Receiver information
 - Transaction amount
 - Transaction expiry status
 - Memo contents (for shielded transactions)
- User can see real-time balance updates after transactions
- User can see pending transaction amounts reflected in balance
- User can distinguish between spendable and total balance
- User can track transaction status and confirmations
- User can view transaction history with proper categorization
- User can cancel expired transactions

Balance Shielding

- User can shield a balance
- User can choose which pool (Orchard or Sapling) to use when shielding a balance
- User can shield only a portion of their balance
- User can see appropriate warnings for transparent transactions regarding privacy implications
- User should see clear privacy indicators during shielding operations

Balance Transfer

- User can transfer an unshielded balance to another user
- User can transfer a shielded balance to another user
- User can select the pool (Orchard or Sapling) when transferring a shielded balance
- User can review transaction details before signing
- User can sign partially constructed transactions
- User can verify transaction recipients and amounts before signing

Address Management

- User can generate new Unified Addresses (UAs)
- User can view the transparent address component within their UA
- User can view all address components within their UA when needed
- User should see validation for different address types (transparent, sapling, UA)
- User cannot generate TEX addresses (ZIP-320)

Fee Management

- User should see ZIP-317 compliant fee calculations by default
- User cannot set arbitrary custom fees
- User should see clear fee estimates before sending transactions
- User should see when a transaction might require additional fees
- User should see clear error messages for insufficient fee situations

Memo and Payment Features

- User can add memos only when sending to shielded addresses
- User can view memos from received shielded transactions
- User should see clear feedback when attempting to add memos to transparent transactions
- User can parse and process ZIP-321 payment requests
- User can verify payment request parameters
- User should see clear warnings for any unusual payment request parameters

General Functionality

- User can access Zcash RPC API through the Snap
- User can use helper and utility functions provided by the Snap to interact with the RPC API

Error Handling and Edge Cases

- User should see appropriate error messages for invalid operations
- User can recover from interrupted operations (e.g., failed transfers)
- User should see clear feedback for insufficient funds
- User should see feedback for network connectivity issues
- User can retry failed transactions when appropriate

Security and Privacy

- User's private keys and sensitive information should remain secure within the Snap
- User's transaction history should be accurately synced from the provided "birthday" date
- User should see clear privacy warnings when using transparent addresses
- User can verify transaction privacy level before sending
- User should see warnings when performing actions that might compromise privacy