

Hedera Testnet Setup Guide

Quick Setup (5 minutes)

Step 1: Get Your Free Testnet Account

1. **Visit Hedera Portal:** <https://portal.hedera.com/register>
2. **Create Account:** Sign up with email (it's free)
3. **Go to Testnet Section:** After login, click on "Testnet" in the dashboard
4. **Create Testnet Account:** Click "Create Testnet Account"
 - You'll automatically get **10,000 test HBAR** (free testnet tokens)
 - Save your **Account ID** (format: **0.0.1234567**)
 - Save your **Private Key** (keep this secret!)

Step 2: Add Credentials to Your App

1. Open `src/config/hedera.config.ts`
2. Replace the placeholder values:

```
export const HEDERA_TESTNET_CREDENTIALS = {  
  // Replace with your actual testnet account ID from Step 1  
  ACCOUNT_ID: '0.0.6566992',  
  
  // Replace with your testnet private key from Step 1  
  PRIVATE_KEY:  
    '0x0b31261b447e9ea6288c3db9544168dc851ec2b68bddecc62e67673bf5f784f4',  
  EVM_ADDRESS: '0x5d3de7f761451cbcbab2d95e8eca3a833d0927c4',  
  
  // Keep other settings as is  
  NETWORK: 'testnet',  
  MAX_TRANSACTION_FEE: 100,  
};
```

Step 3: Test Your Connection

1. Restart your app: `npx expo start --clear`
2. When you submit data to a bounty, you'll see:
 - 🎉 **REAL TRANSACTION SUBMITTED TO HEDERA TESTNET!**
 - A real transaction ID that works on HashScan
 - Your actual account balance

What Happens When Connected?

- ✅ **Real Transactions:** Your health data submissions create real blockchain transactions
- ✅ **HashScan Links Work:** Transaction IDs link to actual explorer pages

- ✅ **HCS Messages:** Metadata stored on Hedera Consensus Service
- ✅ **Free Testing:** Testnet HBAR has no real value - test as much as you want!

Transaction Types

The app uses **Hedera Consensus Service (HCS)** for storing NFT metadata:

- Creates a topic for health data
- Each submission sends a message to the topic
- Messages are immutable and timestamped
- Perfect for health data provenance

Verify Your Transactions

After submitting data:

1. Copy the transaction link
2. Visit HashScan: <https://hashscan.io/testnet>
3. Search for your transaction ID
4. You'll see the real blockchain record!

Troubleshooting

"Transaction failed" Error

- Check your account has HBAR balance
- Verify credentials are correct in config file
- Make sure you're using testnet (not mainnet) credentials

"Invalid credentials format"

- Private key should start with **302e...** (DER format) or **0x...** (hex)
- Account ID format: **0.0.1234567** (three parts separated by dots)

Need More Test HBAR?





- Testnet accounts start with 10,000 HBAR
- If you run out, create a new testnet account (it's free)
- Or use the Hedera faucet for refills

Security Notes

- ⚠️ **NEVER** share your mainnet private keys
- ✅ **Testnet keys** are safe to use for testing
- 🔒 For production, use secure key management services

Next Steps

1. ✅ Connect funded account

2.  Submit real transactions
3.  View on HashScan explorer
4.  Test bounty submissions
5.  Ready for mainnet (when you want real value)

Links

- **Get Account:** <https://portal.hedera.com/>
- **Explorer:** <https://hashscan.io/testnet>
- **Documentation:** <https://docs.hedera.com/>
- **Faucet:** <https://portal.hedera.com/faucet>