

# Redirect Loop Fix - Final Report

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**Date:** October 23, 2025

**Branch:** deployment-fix-verified

**Status:**  Fixed and Pushed

**Latest Commit:** a21ea93

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## Executive Summary

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The infinite redirect loop issue has been successfully resolved by:

1.  **Removing middleware.ts** (already done in commit a8f14b8 )
  2.  **Fixing incorrect redirect paths** (new fix in commit a21ea93 )
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## Issues Identified and Fixed

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### Issue 1: Middleware Causing Redirect Loop FIXED

**Problem:**

- A middleware.ts file was added in commit 3ce6096 that created competing redirect logic
- The middleware was redirecting authenticated users from / to /dashboard
- The server-side app/page.tsx was also redirecting authenticated users to /dashboard
- This created a race condition and infinite redirect loop

**Solution:**

- **Removed middleware.ts entirely** (commit a8f14b8 )
- NextAuth doesn't require custom middleware for basic authentication
- Server-side session checks in layouts are sufficient and more reliable

**Why This Works:**

- Single source of truth for authentication (server-side only)
- No competing redirect logic
- No edge runtime session conflicts
- Follows NextAuth best practices

### Issue 2: Incorrect Redirect Paths FIXED

**Problem:**

- Several pages were redirecting to /auth/signin which **doesn't exist**
- The correct authentication route is /auth/login
- This could cause redirect loops when users access these pages

**Pages Fixed:**

- app/bridge/page.tsx
- app/coaching-hub/page.tsx
- app/profile/page.tsx
- app/settings/page.tsx

**Solution:**

Changed all instances of:

```
redirect("/auth/signin")
```

To:

```
redirect("/auth/login")
```

**Impact:**

- Ensures consistent authentication redirects across all pages
- Prevents potential redirect loops from non-existent routes
- Aligns with the existing auth structure

## Current Authentication Flow

### ✓ Correct Flow (After Fixes):

#### 1. Unauthenticated User:

- Visits `/` → Sees home page ✓
- Visits `/dashboard` → Redirected to `/auth/login` ✓
- Visits protected pages → Redirected to `/auth/login` ✓
- Logs in → Redirected to `/dashboard` ✓

#### 2. Authenticated User:

- Visits `/` → Redirected to `/dashboard` ✓
- Visits `/dashboard` → Sees dashboard ✓
- Visits protected pages → Sees content ✓
- No redirect loops ✓

## Server-Side Authentication Pattern

The application uses server-side authentication checks in layouts and pages:

```
// In app/dashboard/layout.tsx
const session = await getSession(authOptions)
if (!session) {
  redirect("/auth/login")
}

// In app/page.tsx
const session = await getSession(authOptions)
if (session) {
  redirect("/dashboard")
}

// In protected pages
const session = await getSession(authOptions)
if (!session) {
  redirect("/auth/login") // ✓ Fixed: was /auth/signin
}
```




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## Changes Made

### Commit 1: a8f14b8 (Previous Fix)

**Title:** Fix: Remove middleware to resolve infinite redirect loop





**Changes:**

-  Deleted: `middleware.ts`
-  Modified: `lib/auth.ts` (improved redirect callback)
-  Added: Documentation files

### Commit 2: a21ea93 (New Fix)

**Title:** fix: correct redirect paths from `/auth/signin` to `/auth/login`







**Changes:**

-  Fixed: `app/bridge/page.tsx`
-  Fixed: `app/coaching-hub/page.tsx`
-  Fixed: `app/profile/page.tsx`
-  Fixed: `app/settings/page.tsx`

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## Verification

### Files Checked:

-  `middleware.ts` - Does NOT exist (correctly removed)
-  `app/page.tsx` - Correct redirect logic
-  `app/dashboard/layout.tsx` - Correct session check
-  `app/api/auth/[...nextauth]/route.ts` - Proper configuration
-  `lib/auth.ts` - Proper NextAuth setup
-  All protected pages - Now redirect to `/auth/login`

### Redirect Paths Verified:

```
# Command used to verify:
grep -r "/auth/signin" app/

# Result: No matches found 
```

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## Deployment Requirements



### CRITICAL: Set Environment Variables in Vercel

The code is fixed, but you **MUST** set the correct environment variables in Vercel:

1. **Go to Vercel Dashboard:**

- <https://vercel.com/dashboard>
- Select your Studio 2 project
- Go to Settings → Environment Variables

## 2. Set NEXTAUTH\_URL:

```
bash
```

```
NEXTAUTH_URL=https://your-actual-deployment-url.vercel.app
```

- Replace with your actual Vercel URL
- Do NOT use `http://localhost:3000` for production
- Apply to: Production, Preview, and Development

## 3. Verify Other Variables:

```
bash
```

```
NEXTAUTH_SECRET=your-secret-here
```

```
DATABASE_URL=postgresql://your-database-url
```

## 4. Redeploy:

- Vercel will automatically redeploy when it detects the push
- Or manually redeploy from Vercel Dashboard

# Testing After Deployment

## 1. Clear Browser Cache:

- Open browser settings
- Clear cookies and cached files for your site
- Or use incognito/private mode

## 2. Test Authentication Flow:

✓ Visit home page - should see landing page

✓ Click "Sign In" - should go to `/auth/login`

✓ Enter credentials - should redirect to `/dashboard`

✓ Visit `/bridge` - should see bridge page (or redirect to `/auth/login` if not authenticated)

✓ Refresh page - should stay on dashboard

✓ No infinite redirects

## 3. Check Vercel Logs:

- Go to Vercel Dashboard → Deployments
- Click on latest deployment
- Go to Functions tab
- Verify no errors in logs
- Should NOT see repeated calls to `/api/auth/error`

# Why These Fixes Work

## 1. No Middleware = No Competing Redirects

- Server-side authentication is the single source of truth
- No race conditions between middleware and server components
- More reliable session handling with `getSession()`

## 2. Consistent Redirect Paths

- All authentication redirects now point to `/auth/login` (which exists)
- No redirects to non-existent routes like `/auth/signin`
- Prevents confusion and potential loops

### 3. Follows NextAuth Best Practices





- Uses server-side session checks in layouts
- No custom middleware needed for basic authentication
- Reliable and predictable authentication flow

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## Common Issues and Solutions




### Issue: Still Getting Redirect Loop

#### Solutions:

1.  Verify `NEXTAUTH_URL` is set correctly in Vercel (not localhost)
2.  Clear browser cookies and cache completely
3.  Try incognito/private browsing mode
4.  Check Vercel logs for specific errors




### Issue: “Invalid email or password”

#### Solutions:

1.  Verify user exists in database
2.  Check `DATABASE_URL` is set correctly in Vercel
3.  Ensure database migrations are applied


### Issue: “Database connection failed”

#### Solutions:

1.  Verify `DATABASE_URL` in Vercel environment variables
2.  Check database is running and accessible
3.  Test database connection with `node check_db.js`

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## Git History

```
a21ea93 - fix: correct redirect paths from /auth/signin to /auth/login (NEW)
c49f855 -  Database setup complete: migrations applied, docs created
5ccff70 - Add executive summary of redirect loop fix
a8f14b8 - Fix: Remove middleware to resolve infinite redirect loop (PRIMARY FIX)
3ce6096 - feat: Add edge middleware (CAUSED THE ISSUE)
```

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## Key Learnings

### What NOT to Do:

- Don't use `withAuth` middleware if you have server-side session checks
- Don't create competing redirect logic in multiple places
- Don't redirect to non-existent routes
- Don't forget to set `NEXTAUTH_URL` to production URL in Vercel

## ✓ Best Practices:

- Use server-side `getSession()` for authentication checks
  - Keep redirect paths consistent and pointing to existing routes
  - Keep authentication logic simple and in one place (layouts)
  - Set environment variables correctly for each environment
  - Trust NextAuth's built-in flow without custom middleware
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## Next Steps

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### 1. Deploy to Vercel:

- Push has been completed ✓
- Vercel will auto-deploy or manually redeploy

### 2. Set Environment Variables:

- Set `NEXTAUTH_URL` to your Vercel deployment URL
- Verify `NEXTAUTH_SECRET` and `DATABASE_URL` are set

### 3. Test Authentication:

- Clear browser cache
- Test login flow
- Verify no redirect loops
- Check protected pages work correctly

### 4. Monitor:

- Check Vercel logs for errors
  - Verify no `/api/auth/error` calls
  - Ensure users can successfully authenticate
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## Summary

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✓ **Primary Issue:** Middleware removed (commit a8f14b8)

✓ **Secondary Issue:** Redirect paths fixed (commit a21ea93)

✓ **Code Changes:** Complete and pushed to GitHub

⚠ **Action Required:** Set `NEXTAUTH_URL` in Vercel

🎯 **Expected Result:** No more redirect loops, stable authentication

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**Status:** Ready for Deployment

**Last Updated:** October 23, 2025

**Author:** Deployment Fix Bot

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