

# Homes Management API Fix Summary

## Date

January 16, 2026

## Issue

**Error:** “Failed to fetch homes” on Homes Management frontend

**Context:** Frontend working but API endpoint returning errors

## Root Cause Analysis

The API endpoint `/api/admin/homes` existed and was correctly implemented, but lacked:

1. Comprehensive error handling for database queries
2. Detailed logging for production debugging
3. Null-safety checks for optional Prisma relations
4. Error boundaries for metric calculations

## Changes Made

### File Modified

`src/app/api/admin/homes/route.ts`

### Specific Fixes

#### 1. Enhanced Request Logging

```
// Added at start of GET handler
console.log('[Homes API] GET request received');
console.log('[Homes API] Session:', session ? `User: ${session.user?.email}, Role: ${session.user?.role}` : 'No session');
console.log('[Homes API] Query params:', Object.fromEntries(searchParams.entries()));
```

**Purpose:** Track when endpoint is called and with what parameters

#### 2. Database Query Error Handling

```
// Count query with error handling
const totalCount = await prisma.assistedLivingHome.count({ where }).catch((error) => {
  console.error('[Homes API] Count error:', error);
  throw new Error(`Database count failed: ${error.message}`);
});

// Find query with error handling
const homes = await homesQuery.catch((error) => {
  console.error('[Homes API] Query error:', error);
  throw new Error(`Database query failed: ${error.message}`);
});
```

**Purpose:** Catch and log specific database errors with context

### 3. Null-Safety for Optional Relations

```
// Before (could crash if undefined)
const activeResidents = home.residents.filter(r => r.status === 'ACTIVE').length;
const reviewCount = home.reviews.length;

// After (safe with optional chaining and defaults)
const activeResidents = home.residents?.filter(r => r.status === 'ACTIVE').length || 0;
const reviewCount = home.reviews?.length || 0;
```

**Purpose:** Prevent crashes when optional Prisma relations are undefined

### 4. Metric Calculation Error Boundaries

```
const homesWithMetrics = homes.map((home) => {
  try {
    // Calculate metrics
    return { ...home, occupancyRate, activeResidents, ... };
  } catch (metricError) {
    console.error('[Homes API] Error calculating metrics for home:', home.id, metricError);
    // Return home with default metrics if calculation fails
    return { ...home, occupancyRate: '0', activeResidents: 0, ... };
  }
});
```

**Purpose:** Prevent one bad home record from crashing entire response

### 5. Progress Logging

```
console.log(`[Homes API] Found ${totalCount} homes matching filters`);
console.log(`[Homes API] Successfully fetched ${homes.length} homes`);
console.log('[Homes API] Metrics calculated for all homes');
```

**Purpose:** Track progress through API execution for debugging

## Testing

### Build Test

```
npm run build
```

**Result:** Successful (no TypeScript or build errors)

### Git Status

```
git status
```

**Result:** All changes committed

## Deployment

```
git push origin main
```

**Result:** Successfully pushed to GitHub (commit 04186f6)

## Production Deployment

### Next Steps

1. **Render Auto-Deploy:** Changes will automatically deploy via webhook
2. **Monitor Logs:** Check Render logs for [Homes API] prefixed messages
3. **Test Endpoint:** Visit /admin/homes as admin user
4. **Verify Logs:** Look for successful fetch messages or specific error details

### Expected Log Output (Success)

```
[Homes API] GET request received
[Homes API] Session: User: admin@example.com, Role: ADMIN
[Homes API] Query params: {page: "1", limit: "20"}
[Homes API] Found 5 homes matching filters
[Homes API] Successfully fetched 5 homes
[Homes API] Metrics calculated for all homes
```

### Expected Log Output (Error - Database)

```
[Homes API] GET request received
[Homes API] Session: User: admin@example.com, Role: ADMIN
[Homes API] Query params: {page: "1", limit: "20"}
[Homes API] Count error: [Prisma error details]
```

### Expected Log Output (Error - Auth)

```
[Homes API] GET request received
[Homes API] Session: No session
[Homes API] Unauthorized access attempt
```

## Diagnostic Information

### If Error Persists

#### 1. Check Render Logs

Look for [Homes API] messages to identify failure point:

- No logs = Endpoint not being called (check frontend)
- “Unauthorized” = Session/auth issue
- “Count error” = Database connection or schema issue
- “Query error” = Prisma query or relation issue
- “Metrics error” = Data calculation issue

## 2. Verify Database

```
-- Check if homes exist
SELECT COUNT(*) FROM "AssistedLivingHome";

-- Check home-operator relations
SELECT h.id, h.name, o.id AS operator_id, o."companyName"
FROM "AssistedLivingHome" h
LEFT JOIN "Operator" o ON h."operatorId" = o.id
LIMIT 5;

-- Check for homes without operators (would cause query to fail)
SELECT COUNT(*) FROM "AssistedLivingHome" h
WHERE NOT EXISTS (
    SELECT 1 FROM "Operator" o WHERE o.id = h."operatorId"
);
```

## 3. Check Frontend Network Tab

- Open browser DevTools > Network
- Visit `/admin/homes`
- Look for `/api/admin/homes` request
- Check status code and response body

## 4. Test API Directly

```
curl -H "Cookie: next-auth.session-token=YOUR_TOKEN" \
      https://getcarelinkai.com/api/admin/homes?page=1&limit=20
```

## Rollback Plan

If this fix causes issues:

```
git revert 04186f6
git push origin main
```

This will revert to the previous version while maintaining Git history.

## Related Files

- Frontend: `src/app/admin/homes/page.tsx`
- API: `src/app/api/admin/homes/route.ts`
- Schema: `prisma/schema.prisma` (AssistedLivingHome, Operator models)
- Auth: `src/lib/auth.ts` (NextAuth config)

## Commit Details

- **Commit:** 04186f6
- **Message:** “Fix: Add comprehensive error handling and logging to Homes Management API”
- **Branch:** main
- **Date:** 2026-01-16
- **Files Changed:** 1 (`src/app/api/admin/homes/route.ts`)

- **Lines Added:** 61
- **Lines Removed:** 32

## Success Metrics

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### Definition of Success

1.  API returns 200 status code
2.  Frontend displays homes list or “No homes found”
3.  No “Failed to fetch homes” error
4.  Logs show successful query execution

### If Successful

- Monitor for 24 hours
- Mark as resolved
- Remove excessive debug logging in future update

### If Unsuccessful

- Review Render logs for specific error messages
- Database integrity check
- Session/authentication verification
- Consider adding more granular error handling

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**Status:**  **DEPLOYED**

**Next Action:** Monitor production logs for 24 hours