Render Deployment Monitoring Guide

Project: CareLinkAI
Deployment Date: December 8, 2025
Latest Commit: `a5bb736`

🎯 Quick Start: Where to Monitor

Primary Monitoring Location:

Render Dashboard: https://dashboard.render.com/web/srv-d3isol3uibr73d5fm1g

What You Should See:

1. Events Tab (Most Important)

This shows real-time deployment progress.

Expected Flow:

```
⏳ Deploy started
⏳ Installing dependencies...
⏳ Running build command...
⏳ Running Prisma migrations...
⏳ Generating Prisma client...
⏳ Building Next.js application...
⏳ Deploy live
✅ Deploy succeeded
```

Timeline:
- Total time: 5-7 minutes
- If longer than 10 minutes, check logs for issues

📋 Step-by-Step Monitoring Process

STEP 1: Access Render Dashboard (Immediately)

1. Go to: https://dashboard.render.com
2. Sign in with your credentials
3. Navigate to the `carelinkai` service
4. Click on the **“Events”** tab

What to Look For:
- A new deployment should appear at the top
- Status should show “Deploy in progress”
- Commit hash should match: `a5bb736`

STEP 2: Watch the Build Logs (0-3 minutes)

Click on the deployment event to see detailed logs.

Expected Log Sequence:

```
==> Cloning from https://github.com/profyt7/carelinkai...
==> Checking out commit a5bb736...

==> Installing dependencies
npm install
✓ Installed 234 packages

==> Running build command
npm run build
✓ Next.js build completed

==> Build successful
```

🚨 **Red Flags to Watch For:**
- ❌ "npm install failed"
- ❌ "Build error"
- ❌ "TypeScript errors"
- ❌ "Out of memory"

If You See Errors:
- Take a screenshot of the error
- Note the exact error message
- Check the troubleshooting section below

STEP 3: Monitor Prisma Migration (3-5 minutes)

Expected Migration Logs:

```
==> Running Prisma migrations
npx prisma migrate deploy

Prisma Migrate: deployment engine
Running migration: 20251208214408_phase3_compliance_family_updates

✓ Migration 20251208214408_phase3_compliance_family_updates applied

All migrations have been applied.
```

What This Means:
- ✅ New database tables created (`ResidentComplianceItem`, `FamilyContact`)
- ✅ Existing tables updated with new fields
- ✅ Schema is now in sync with code

🚨 **Migration Red Flags:**
- ❌ "Migration failed"
- ❌ "Unique constraint violation"
- ❌ "Column already exists" (should NOT happen - migration is idempotent)

If Migration Fails:
- Don't panic - idempotent design means it's safe to retry
- Check if migration was partially applied
- Review the migration SQL file for issues

STEP 4: Application Startup (5-7 minutes)

Expected Startup Logs:

```
==> Starting service
▲ Starting Next.js server...
▲ Ready on http://0.0.0.0:3000

✓ Health check passed
✓ Deploy live
```

What to Look For:
- "Ready on http..." message
- No error stack traces
- Health check passing

🚨 **Startup Red Flags:**
- ❌ "Error: Cannot find module"
- ❌ "Database connection failed"
- ❌ "Port already in use"
- ❌ Application keeps restarting

STEP 5: Post-Deployment Verification (7-15 minutes)

Once deployment shows "✓ Deploy succeeded", test the application:

A. Basic Application Access

1. **Open the application:**
   - URL: https://carelinkai.onrender.com
   - Expected: Login page loads without errors

2. **Log in:**
   - Use admin credentials
   - Expected: Successfully authenticates

B. Test Phase 3 Features

1. **Navigate to Residents Module:**
   `Dashboard → Operator → Residents → [Select any resident]`

2. **Test Compliance Tab:**
   - Click on "Compliance" tab
   - Expected: Tab loads without errors

- Expected: Shows “No compliance items” or existing items
- **Create Test Item:**
  - Click “Add Compliance Item”
  - Fill out form (type, status, dates)
  - Click “Save”
  - Expected: Item appears in list

3. **Test Family Tab:**
   - Click on “Family” tab
   - Expected: Tab loads without errors
   - Expected: Shows “No family contacts” or existing contacts
   - **Create Test Contact:**
     - Click “Add Family Contact”
     - Fill out form (name, relationship, contact info)
     - Click “Save”
     - Expected: Contact appears in list

C. Verify Data Persistence

1. Refresh the page
2. Navigate back to Compliance/Family tabs
3. Expected: Test data still visible (not lost)

🔍 Where to Find Key Information

1. Build Logs

- **Location:** Render Dashboard → carelinkai service → Events → Click deployment
- **Shows:** Detailed build and migration output
- **Useful for:** Debugging build failures

2. Application Logs (Live Logs)

- **Location:** Render Dashboard → carelinkai service → Logs tab
- **Shows:** Real-time application output
- **Useful for:** Runtime errors, API requests, database queries

3. Metrics

- **Location:** Render Dashboard → carelinkai service → Metrics tab
- **Shows:** CPU, memory, response times
- **Useful for:** Performance monitoring

4. Environment Variables

- **Location:** Render Dashboard → carelinkai service → Environment tab
- **Shows:** DATABASE_URL, API keys, etc.
- **Useful for:** Verifying configuration

⚠️ Common Issues & Solutions

Issue 1: Build Takes Longer Than 10 Minutes

Possible Causes:
- Render server is slow
- npm install taking too long
- Next.js build is stuck

Solution:
- Wait another 5 minutes
- If still stuck after 15 minutes, cancel and restart deployment
- Check Render status page: https://status.render.com

Issue 2: Migration Fails

Error: `Migration already applied` or `Column already exists`

Solution:
This is unusual given our idempotent migration design. To investigate:

1. Check database directly:
   ```bash
   # In Render Shell
   psql $DATABASE_URL
   \dt  # List tables
   \d "ResidentComplianceItem"  # Check table structure
   ```

2. If needed, manually resolve:
   ```bash
   npx prisma migrate resolve --rolled-back 20251208214408_phase3_compliance_family_updates
   ```

Issue 3: Application Crashes on Startup

Error: “Cannot find module” or “Database connection failed”

Solution:
1. **Check Environment Variables:**
- Verify DATABASE_URL is set correctly
- Check all required env vars are present

1. **Check Database Connection:**
   - Go to Render → PostgreSQL dashboard
   - Verify database is running
   - Check connection string format

2. **Review Logs:**
   - Look for specific error messages
   - Note the stack trace
   - Check if Prisma client was generated

Issue 4: Phase 3 Features Not Working

Symptoms:
- Compliance/Family tabs show errors
- API requests fail
- Data doesn't save

Solution:
1. **Check Browser Console:**
- Open Developer Tools (F12)
- Look for JavaScript errors
- Check Network tab for failed API requests

1. **Check API Endpoints:**
   - Test directly: `https://carelinkai.onrender.com/api/residents/[id]/compliance`
   - Expected: Returns JSON data or empty array

2. **Check Database:**
   - Verify tables exist
   - Verify migration was applied
   ```bash
   psql $DATABASE_URL
   SELECT * FROM "_prisma_migrations" WHERE name LIKE '%phase3%';
   ```

📊 Success Indicators

✅ Deployment Successful If:

1. **Build Phase:**
   - ✅ All dependencies installed
   - ✅ TypeScript compilation successful
   - ✅ Next.js build completed
   - ✅ No error messages in build logs

2. **Migration Phase:**
   - ✅ Migration `20251208214408_phase3_compliance_family_updates` applied
   - ✅ No database errors
   - ✅ Prisma client generated successfully

3. **Application Phase:**
   - ✅ Server starts and stays running
   - ✅ Health check passes
   - ✅ Application URL is accessible
   - ✅ Login works

4. **Feature Phase:**
   - ✅ Compliance tab loads
   - ✅ Family tab loads
   - ✅ Can create compliance items
   - ✅ Can create family contacts
   - ✅ Data persists after refresh

🎬 What Happens After Deployment

Auto-Deploy is Enabled

This Means:
- Every time you push to `main` branch, Render automatically deploys
- No manual intervention needed
- Deployment typically takes 5-7 minutes

To Disable Auto-Deploy (if needed):
1. Go to Render Dashboard → carelinkai service → Settings
2. Find “Auto-Deploy” section
3. Change from “On Commit” to “Manual Deploy”

📞 Getting Help

If You Encounter Issues:

1. **Check Render Status First:**
   - https://status.render.com
   - Look for ongoing incidents

2. **Review Recent Changes:**
   - Check if anyone else pushed code
   - Review commit history: `git log`

3. **Check Render Logs:**
   - Build logs for deployment errors
   - Live logs for runtime errors
   - Metrics for performance issues

4. **Database Health:**
   - Go to Render → PostgreSQL dashboard
   - Check connection count
   - Check database size
   - Run test queries

📸 Screenshots to Take (For Documentation)

If you want to document the deployment:

1. **Pre-Deployment:**
   - Screenshot of GitHub commits
   - Screenshot of old application (before Phase 3)

2. **During Deployment:**
   - Screenshot of Render Events showing “Deploy in progress”
   - Screenshot of build logs
   - Screenshot of migration logs

3. **Post-Deployment:**
   - Screenshot of “Deploy succeeded” message
   - Screenshot of Compliance tab working
   - Screenshot of Family tab working

⏱️ Expected Timeline Summary

Phase	Time	What’s Happening
Push to GitHub	0:00	✅ Complete
Render Detects Changes	0:00-0:30	Webhook triggered
Build Starts	0:30-1:00	Dependencies installing
Build Completes	3:00-4:00	Next.js build finishes
Migration Runs	4:00-5:00	Database updated
Deploy Live	5:00-7:00	Application starts
Health Check	7:00-8:00	Verification complete
Ready for Testing	8:00+	✅ Deployment complete

🎯 Your Next Steps

RIGHT NOW (Next 10 minutes):

1. ✅ **Go to Render Dashboard**
   - URL: https://dashboard.render.com/web/srv-d3isol3uibr73d5fm1g
   - Click on “Events” tab
   - Watch deployment progress

2. ⏳ **Wait for “Deploy succeeded”**
   - Should appear in 5-7 minutes
   - Don’t interrupt the deployment

AFTER DEPLOYMENT SUCCEEDS (Next 15 minutes):

1. ✅ **Test the application**
   - Visit: https://carelinkai.onrender.com
   - Log in and navigate to Residents
   - Test Compliance and Family tabs

2. ✅ **Verify data persistence**
   - Create test compliance item

- Create test family contact
- Refresh page and verify they're still there

OPTIONAL (Later today):

1. 📝 **Document the deployment**
   - Take screenshots of successful deployment
   - Update team on new features
   - Schedule demo for stakeholders

🎉 Congratulations!

You've successfully deployed **Phase 3** of the CareLinkAI Residents Module!

New Features Now Live:
- ✅ Compliance tracking for residents
- ✅ Family contact management
- ✅ Permission-based access controls
- ✅ Expiry date tracking and alerts

What's Next:
- Phase 4: Advanced features (care plans, medication tracking)
- User training on new features
- Gathering feedback from operators

Happy Monitoring! 🚀

If you have any questions or encounter issues, refer to the troubleshooting section or check the deployment logs.