

Studio 2 - Vercel Deployment Troubleshooting Guide

Common issues and solutions when deploying Studio 2 to Vercel.

Build Issues

Issue: “Module not found” Error

Symptoms:

```
Error: Cannot find module 'xyz'
Module not found: Can't resolve 'xyz'
```

Solutions:

1. Missing dependency in package.json

```
``bash
# Install the missing package
npm install -save

# Commit and push
git add package.json package-lock.json
git commit -m "Add missing dependency"
git push
``
```

1. Case-sensitive imports

- Linux (Vercel) is case-sensitive, Windows/Mac may not be
 - Ensure import paths match exact file names
- ```
``javascript
// Wrong
import Component from './MyComponent' // if file is myComponent.tsx
```

```
// Correct
import Component from './myComponent'
``
```

##### 1. Clear node\_modules and reinstall

```
bash
rm -rf node_modules package-lock.json
npm install
git add package-lock.json
git commit -m "Regenerate package-lock.json"
git push
```

---

## Issue: “Prisma Client not generated” or “Can’t find @prisma/client”

### Symptoms:

```
Error: @prisma/client did not initialize yet
Invalid prisma.client invocation
```

### Solutions:

#### 1. Add postinstall script

Edit `package.json` :

```
json
{
 "scripts": {
 "postinstall": "npx prisma generate",
 "vercel-build": "npx prisma generate && npx prisma migrate deploy && next build"
 }
}
```

#### 1. Update vercel.json build command

```
json
{
 "buildCommand": "npx prisma generate && npm run build"
}
```

#### 2. Check `prisma/schema.prisma`

- Ensure `output` is NOT hardcoded to a specific path

```
prisma
generator client {
 provider = "prisma-client-js"
 // Don't use: output = "/absolute/path"
}
```

## Issue: TypeScript Build Errors

### Symptoms:

```
Type error: ...
TS2304: Cannot find name 'xyz'
```

### Solutions:

#### 1. Temporarily ignore during builds (Quick fix)

In `next.config.js` :

```
javascript
typescript: {
```

```
 ignoreBuildErrors: true, // Change to true
 },
```

#### 1. **Fix TypeScript errors** (Proper fix)

```
```bash
# Check for errors locally
npm run build

# Fix reported errors
# Then commit and push
```
```

#### 1. **Update tsconfig.json**

```
json
{
 "compilerOptions": {
 "strict": false,
 "skipLibCheck": true
 }
}
```

## Issue: ESLint Errors Blocking Build

### Symptoms:

```
Error: ESLint: ...
Failed to compile due to ESLint errors
```

### Solutions:

#### 1. **Ignore ESLint during builds** (Already configured)

In `next.config.js`:

```
javascript
eslint: {
 ignoreDuringBuilds: true,
},
```

#### 1. **Fix ESLint errors locally**

```
bash
npm run lint
Fix reported issues
```

## Issue: Build Timeout

### Symptoms:

```
Error: Build exceeded maximum duration
Task timed out after 15 minutes
```

**Solutions:****1. Remove large files from repo**

```

```bash
# Find large files
find . -type f -size +10M

# Add to .gitignore
echo "large-file.zip" >> .gitignore
git rm --cached large-file.zip
git commit -m "Remove large file"
git push
```

```

**1. Optimize dependencies**

```

```bash
# Remove unused dependencies
npm uninstall

# Use npm prune
npm prune
```

```

**1. Upgrade Vercel plan** (if needed)

- Free plan: 15 min build time
- Pro plan: 45 min build time

## Database Issues

**Issue: “Database connection failed”****Symptoms:**

```

Error: P1001: Can't reach database server
Invalid connection string

```

**Solutions:****1. Check DATABASE\_URL format**

```

```

```

Correct format:

```
postgresql://USER:PASSWORD@HOST:PORT/DATABASE?connect_timeout=15
```

Example:

```
postgresql://user:pass@db.vercel.app:5432/mydb?connect_timeout=15
```

```

```

```

**1. Verify environment variable is set**

- Go to Vercel Dashboard → Settings → Environment Variables
- Ensure `DATABASE_URL` exists for Production, Preview, and Development
- Click “Redeploy” after adding

## 2. Test connection locally

```
```bash
# Pull environment variables
vercel env pull .env.local

# Test Prisma connection
npx prisma db pull
```
```

### 1. Check database provider status

- Vercel Postgres: Check Vercel Dashboard → Storage
- External provider: Check provider's status page

## Issue: “Prisma migration failed”

### Symptoms:

```
Error: Migration failed
P3009: Failed to migrate
```

### Solutions:

#### 1. Run migrations manually

```
```bash
# Install Vercel CLI
npm i -g vercel

# Login and link project
vercel login
vercel link

# Pull env variables
vercel env pull .env.local

# Run migrations
npx prisma migrate deploy
```
```

#### 1. Reset database (⚠ DESTROYS ALL DATA)

```
bash
npx prisma migrate reset
npx prisma migrate deploy
```

#### 2. Check database permissions

- Ensure database user has CREATE/ALTER permissions
- For managed databases, check provider settings

## Issue: “Too many database connections”

### Symptoms:

```
Error: P1001: Too many connections
Connection pool timeout
```

### Solutions:

#### 1. Add connection pooling to DATABASE\_URL

```
postgresql://user:pass@host:5432/db?connection_limit=5&pool_timeout=10
```

#### 2. Use Prisma Accelerate (for high-traffic apps)

- Visit [prisma.io/accelerate](https://www.prisma.io/data-platform/accelerate) (<https://www.prisma.io/data-platform/accelerate>)
- Get connection pooling URL
- Replace DATABASE\_URL with Accelerate URL

#### 3. Close unused connections

- Review API routes for unclosed Prisma clients
- Use `prisma.$disconnect()` when needed

## Authentication Issues

### Issue: “NEXTAUTH\_URL is required”

#### Symptoms:

```
Error: NEXTAUTH_URL environment variable is not set
NextAuth configuration error
```

#### Solutions:

##### 1. Add NEXTAUTH\_URL to Vercel

- Go to Settings → Environment Variables
- Add `NEXTAUTH_URL` with value `https://your-app.vercel.app`
- Select all environments (Production, Preview, Development)
- Redeploy

##### 2. Update after deployment

- Get your actual Vercel URL after first deploy
- Update `NEXTAUTH_URL` with the correct URL
- Redeploy again

### Issue: “Invalid NEXTAUTH\_SECRET”

#### Symptoms:

```
Error: NEXTAUTH_SECRET must be provided
JWT verification failed
```

**Solutions:****1. Generate a new secret**

```
bash
openssl rand -base64 32
```

**2. Add to Vercel environment variables**

- Settings → Environment Variables
- Add `NEXTAUTH_SECRET` with generated value
- Must be at least 32 characters
- Redeploy

**3. Check secret is not empty**

- Ensure no trailing spaces
- Ensure quotes are not included in the value

**Issue: “Session not persisted / User logged out randomly”****Symptoms:**

- Users get logged out frequently
- Session doesn't persist across page reloads

**Solutions:****1. Check NEXTAUTH\_URL matches deployment URL**

```
Wrong: https://studio2-app.vercel.app/
Right: https://studio2-app.vercel.app
(no trailing slash)
```

**2. Verify database session storage**

```
bash
Check Session table exists
npx prisma studio
Look for "Session" model
```

**3. Clear browser cookies and cache**

- Development issue may be cached old sessions

**Runtime Errors****Issue: “404 Not Found” for API routes****Symptoms:**

- API routes return 404
- `/api/...` endpoints don't work

**Solutions:****1. Check API route file location**

```
```
```

Correct structure:

app/api/route-name/route.ts

Or (pages directory):

pages/api/route-name.ts

...

1. Verify route.ts exports

```
typescript
// app/api/hello/route.ts
export async function GET(request: Request) {
  return Response.json({ message: 'Hello' });
}
```

2. Check vercel.json routing

```
json
{
  "rewrites": [
    {
      "source": "/api/:path*",
      "destination": "/api/:path*"
    }
  ]
}
```

Issue: “Function execution timeout”

Symptoms:

```
Error: Function execution exceeded timeout
Task timed out after 10 seconds
```

Solutions:

1. Increase timeout in vercel.json

```
json
{
  "functions": {
    "app/api/**/*.ts": {
      "maxDuration": 30
    }
  }
}
```

Free plan: max 10s

Pro plan: max 60s

1. Optimize slow operations

- Add database indexes
- Reduce query complexity

- Use pagination for large datasets
 - Cache frequently accessed data
2. **Use background jobs** (for long operations)
 - Consider using queues (e.g., Vercel Cron, Inngest)
 - Process large operations asynchronously

Issue: “500 Internal Server Error”

Symptoms:

- Random 500 errors
- No specific error message

Solutions:

1. Check Function Logs

- Vercel Dashboard → Deployments → Click deployment → Function Logs
- Look for error details

2. Add error logging

```
typescript
try {
  // Your code
} catch (error) {
  console.error('Error details:', error);
  return Response.json({ error: 'Internal error' }, { status: 500 });
}
```

3. Common causes:

- Missing environment variables
- Database connection issues
- Unhandled promise rejections
- Timeout exceeded



Frontend Issues

Issue: “Hydration mismatch” or “Text content does not match”

Symptoms:

```
Error: Hydration failed
Text content does not match server-rendered HTML
```

Solutions:

1. Check for Date/Time rendering

```
``typescript
// Wrong (server/client mismatch)

{new Date().toString()}
```

```
// Right (use useEffect for client-only)
const [date, setDate] = useState('');
useEffect(() => {
  setDate(new Date().toString());
}, []);
```

```

#### 1. Use `suppressHydrationWarning`

```
```typescript

{new Date().toString()}
```
```

#### 1. Check for `localStorage` usage in component

```
typescript
// Use useEffect for client-side only code
useEffect(() => {
 const data = localStorage.getItem('key');
}, []);
```

## Issue: “Images not loading” or “Image optimization failed”

### Symptoms:

- Images show broken
- 404 errors for images

### Solutions:

#### 1. Check image paths

```
```typescript
// Wrong

// Right
```
```

#### 1. Use `Next.js` Image component

```
```typescript
import Image from 'next/image';
```

Description

```
```
```

#### 1. Add domains to `next.config.js` (for external images)

```
javascript
images: {
 domains: ['example.com', 'cdn.example.com'],
},
```

## Environment Variables Issues

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### Issue: Environment variables not updating

#### Symptoms:

- Changed env variables but app still uses old values
- New variables not being picked up

#### Solutions:

##### 1. Redeploy after changes

- Changes require a new deployment
- Go to Deployments → Redeploy

##### 2. Check environment selection

- Ensure variable is set for correct environment:

- ☒ Production
- ☒ Preview
- ☒ Development

##### 3. Use correct syntax in code

```
``typescript
// Server-side (Node.js)
process.env.DATABASE_URL

// Client-side (must prefix with NEXT_PUBLIC_)
process.env.NEXT_PUBLIC_API_KEY
````
```

Vercel CLI Issues

Issue: “Vercel command not found”

Solutions:

```
# Install globally
npm install -g vercel

# Or use npx
npx vercel --version
```

Issue: “Login failed” or “Authentication error”

Solutions:

```
# Logout and login again
vercel logout
vercel login

# Or use token
vercel --token YOUR_TOKEN
```



Performance Issues

Issue: “Slow page load” or “Poor performance”

Solutions:

1. Enable Speed Insights

- Vercel Dashboard → Speed Insights → Enable

2. Optimize images

- Use Next.js Image component
- Compress images before uploading
- Use WebP format

3. Add loading states

```
``typescript
const { data, isLoading } = useSWR('/api/data');
```

```
if (isLoading) return ;
```

```
``
```

1. Use static generation where possible

```
typescript
// app/page.tsx
export const revalidate = 3600; // Revalidate every hour
```



Still Having Issues?

Debug Checklist

1. Check build logs

- Vercel Dashboard → Deployments → Click deployment → Build Logs

2. Check function logs

- Vercel Dashboard → Deployments → Click deployment → Function Logs

3. Check environment variables

- Settings → Environment Variables
- Verify all required variables are set

4. Test locally

```
bash
vercel env pull .env.local
npm run dev
```

5. Check Vercel status

- Visit [vercel-status.com](https://www.vercel-status.com/) (<https://www.vercel-status.com/>)

Get Help

- [Vercel Documentation](https://vercel.com/docs) (<https://vercel.com/docs>)
- [Vercel Community](https://github.com/vercel/vercel/discussions) (<https://github.com/vercel/vercel/discussions>)
- [Next.js Documentation](https://nextjs.org/docs) (<https://nextjs.org/docs>)
- [Prisma Documentation](https://www.prisma.io/docs) (<https://www.prisma.io/docs>)

Common Error Codes

| Error Code | Meaning | Solution |
|-------------------------------|-----------------------------|---|
| <code>MODULE_NOT_FOUND</code> | Missing dependency | Install missing package |
| <code>ENOTFOUND</code> | DNS/Network issue | Check DATABASE_URL and network |
| <code>ETIMEDOUT</code> | Connection timeout | Add <code>connect_timeout=15</code> to DATABASE_URL |
| <code>P1001</code> | Can't reach database | Check DATABASE_URL and database status |
| <code>P2002</code> | Unique constraint violation | Check for duplicate data |
| <code>P2025</code> | Record not found | Check query logic |

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Need more help? Check the main [VERCEL_DEPLOYMENT_GUIDE.md](#) (`./VERCEL_DEPLOYMENT_GUIDE.md`)