



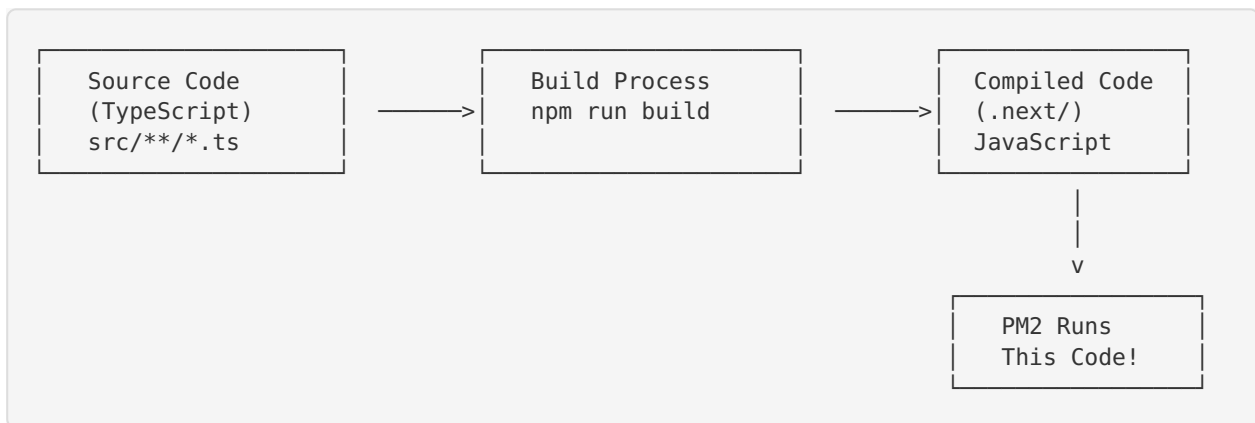
# REBUILD REQUIRED AFTER PULLING CODE

## What Happened?

You pulled the latest code changes with `git pull`, but **the errors are still appearing** because you didn't rebuild the application!

## The Problem: Source Code vs. Compiled Code

Next.js is a **compiled framework**. Here's what that means:



### Key Points:

1. **Source code** = What you edit in `src/` directory (TypeScript)
2. **Compiled code** = What PM2 actually runs (JavaScript in `.next/` directory)
3. `git pull` = Updates source code only ✓
4. `npm run build` = Compiles source → compiled code ✓
5. `pm2 restart` = Restarts the app using compiled code ✓

## What You Did:

```

git pull origin main      # ✓ Updated source code
pm2 restart all           # ✓ Restarted the app
# ✗ MISSING: npm run build # ← This is the problem!
  
```

## Why Errors Persist:

Even though your source code has the fixes:

- ✓ `getGenerationJobStatus` export exists in source
- ✓ Concurrent workers reduced to 3
- ✓ File size logging added

**BUT** the compiled code in `.next/` still has the OLD code:

- ✗ Missing `getGenerationJobStatus` export
- ✗ Old worker count
- ✗ No file size logging

PM2 runs the **compiled code**, not the source code!

## The Fix: Rebuild Your Application

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### Step 1: Stop PM2

```
pm2 stop all
```

### Step 2: Navigate to Your Installation

```
cd ~/Sports-Bar-TV-Controller
```

### Step 3: Pull Latest Changes (if not already done)

```
git pull origin main
```

### Step 4: REBUILD THE APPLICATION (This is the critical step!)

```
npm run build
```

#### What this does:

- Compiles TypeScript → JavaScript
- Bundles all dependencies
- Optimizes code for production
- Updates the `.next/` directory with fresh compiled code
- **This is what PM2 will actually run!**

#### Expected output:

- ☑ Compiled successfully
- ☑ Linting **and** checking validity of types
- ☑ Collecting page data
- ☑ Generating static pages (X/X)
- ☑ Finalizing page optimization

### Step 5: Restart PM2

```
pm2 restart all
```

### Step 6: Verify the Fix

```
pm2 logs --lines 50
```

#### Look for:

- ☑ No more “getGenerationJobStatus is not a function” errors
  - ☑ “Starting Q&A generation for X files with 3 concurrent workers”
  - ☑ File size logging: “[X/Y] Processing (0.06MB): /path/to/file”
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## Complete Command Sequence

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Copy and paste this entire block:

```
# Stop the application
pm2 stop all

# Navigate to installation directory
cd ~/Sports-Bar-TV-Controller

# Pull latest changes
git pull origin main

# Install any new dependencies (just in case)
npm install

# REBUILD THE APPLICATION (Critical!)
npm run build

# Restart the application
pm2 restart all

# Check logs for verification
pm2 logs --lines 50
```

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## Verification Script

We've created a script to check if your build is up-to-date:

```
cd ~/Sports-Bar-TV-Controller
bash scripts/verify_build.sh
```

This will tell you if you need to rebuild.

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## Understanding the Build Process

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### When Do You Need to Rebuild?

#### **ALWAYS rebuild after:**

- ☒ `git pull` (pulling code changes)
- ☒ Editing TypeScript files in `src/`
- ☒ Changing configuration files
- ☒ Installing new npm packages
- ☒ Updating dependencies

#### **You DON'T need to rebuild for:**

- ☒ Restarting PM2 only
- ☒ Changing environment variables ( `.env` )
- ☒ Viewing logs

## Build Time

The build process typically takes **1-3 minutes** depending on:

- Number of changes
- Server resources
- Cache state

**Don't skip it!** It's essential for your changes to take effect.

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## Troubleshooting

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### Build Fails with Errors

If `npm run build` fails:

1. **Check for TypeScript errors:**

```
bash
npm run type-check
```

2. **Clear cache and rebuild:**

```
bash
rm -rf .next
npm run build
```

3. **Reinstall dependencies:**

```
bash
rm -rf node_modules
npm install
npm run build
```

### Errors Still Appear After Rebuild

1. **Verify build completed successfully:**

- Look for "✓ Compiled successfully" message
- Check that `.next/` directory was updated

2. **Check PM2 is using the right directory:**

```
bash
pm2 describe sports-bar-tv-controller
```

- Verify "cwd" points to `~/Sports-Bar-TV-Controller`

3. **Hard restart PM2:**

```
bash
pm2 delete all
pm2 start ecosystem.config.js
```

### Still Having Issues?

Check the logs:

```
pm2 logs --lines 100
```

Look for:

- Build errors
- Import errors
- Missing dependencies

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## Prevention: Always Remember

### The Golden Rule:

```
git pull → npm run build → pm2 restart
```

### Never skip the middle step!

Think of it like this:

- `git pull` = Getting new ingredients
- `npm run build` = Cooking the meal
- `pm2 restart` = Serving the meal

You can't serve raw ingredients! You need to cook them first. 🔍

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## Quick Reference Card

AFTER PULLING CODE, ALWAYS RUN:

1. `pm2 stop all`
2. `cd ~/Sports-Bar-TV-Controller`
3. `git pull origin main`
4. `npm run build` ← DON'T SKIP THIS!
5. `pm2 restart all`
6. `pm2 logs --lines 50` (verify)

Build time: 1-3 minutes

This is **REQUIRED** for changes to take effect!

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## Summary

- ✓ **Source code** (what you edit) ≠ **Compiled code** (what runs)
- ✓ `git pull` updates source, but PM2 runs compiled code
- ✓ `npm run build` is **REQUIRED** to compile source → compiled
- ✓ Without rebuilding, your changes won't take effect
- ✓ Always: `git pull` → `npm run build` → `pm2 restart`

**Remember:** Next.js is not like PHP or Python where you can just edit and reload. It's a compiled framework that requires a build step!