New Mexico Reggae Calendar - Deployment Guide

Prerequisites

- 1. Vercel Account: Sign up at vercel.com (https://vercel.com)
- 2. GitHub Account: For code repository management
- 3. Database: PostgreSQL database (recommended: Neon, PlanetScale, or Railway)

Step 1: Database Setup

Option 1: Using Neon (Recommended)

- 1. Go to neon.tech (https://neon.tech) and create an account
- 2. Create a new project
- 3. Copy the database URL (starts with postgresq1://)

Option 2: Using PlanetScale

- 1. Go to planetscale.com (https://planetscale.com) and create an account
- 2. Create a new database
- 3. Get the connection string

Option 3: Using Railway

- 1. Go to railway.app (https://railway.app) and create an account
- 2. Create a PostgreSQL database
- 3. Copy the database URL

Step 2: Prepare Your Code

1. Push to GitHub:

```
bash

cd /home/ubuntu/nm-reggae-calendar

git init

git add .

git commit -m "Initial commit - NM Reggae Calendar"

git branch -M main

git remote add origin https://github.com/yourusername/nm-reggae-calendar.git

git push -u origin main
```

2. Verify Environment Variables:

- Copy .env.example to .env.local locally if needed
- Never commit actual . env files to git

Step 3: Deploy to Vercel

Method 1: Vercel Dashboard (Recommended)

1. Go to vercel.com/dashboard (https://vercel.com/dashboard)

- 2. Click "New Project"
- 3. Import your GitHub repository
- 4. Configure project:
 - Framework Preset: Next.js
 - Build Command: next build (auto-detected)
 - Install Command: yarn install
 - Output Directory: .next (auto-detected)

Method 2: Vercel CLI

```
npm i -g vercel
cd /home/ubuntu/nm-reggae-calendar/app
vercel --prod
```

Step 4: Configure Environment Variables

In your Vercel project dashboard:

- 1. Go to **Settings** → **Environment Variables**
- 2. Add the following variables:

Variable	Value	Environment
DATABASE_URL	Your PostgreSQL connection string	Production, Preview, Development
ADMIN_PASSWORD	Your chosen admin password	Production, Preview, Development

1. Important: Use Vercel's environment variable encryption for sensitive data

Step 5: Initial Database Setup

After deployment, you need to initialize your database:

1. Using Vercel CLI:

```
bash
vercel env pull .env.local
cd /home/ubuntu/nm-reggae-calendar/app
npx prisma generate
npx prisma db push
npx prisma db seed
```

- 2. Or via your production environment:
 - Trigger a redeploy to run migrations automatically
 - Check deployment logs for any issues

Step 6: Custom Domain (Optional)

1. In Vercel dashboard, go to $\mathbf{Settings} \to \mathbf{Domains}$

- 2. Add your custom domain: nmreggaecalendar.com
- 3. Configure DNS settings as instructed by Vercel
- 4. SSL certificates are automatically provisioned

Step 7: Verify Deployment

- 1. Check the main calendar: https://your-app.vercel.app
- 2. **Test the admin interface**: https://your-app.vercel.app/admin
- 3. Verify API endpoints:
 - https://your-app.vercel.app/api/events
 - https://your-app.vercel.app/api/admin/backup?password=yourpassword

Troubleshooting

Common Issues:

- 1. Database Connection Errors:
 - Verify DATABASE_URL is correct
 - Check if database allows external connections
 - Ensure Prisma schema is pushed: npx prisma db push

2. Build Failures:

- Check build logs in Vercel dashboard
- Verify all dependencies are in package.json
- Run yarn build locally to test

3. API Route Errors:

- Check function logs in Vercel dashboard
- Verify environment variables are set
- Test API routes locally first

4. Authentication Issues:

- Verify ADMIN PASSWORD environment variable
- Check browser console for errors

Performance Optimization:

1. Enable Vercel Analytics:

```
bash
  yarn add @vercel/analytics
Add to your layout.tsx:
typescript
  import { Analytics } from '@vercel/analytics/react'
  // Add <Analytics /> to your component
```

2. Configure Edge Runtime (optional):

Add to API routes that don't use Prisma:

```
typescript
  export const runtime = 'edge'
```

Monitoring & Maintenance

1. Set up monitoring:

- Enable Vercel Analytics
- Monitor function duration and invocations
- Set up error tracking

2. Regular maintenance:

- Monitor database usage
- Update dependencies regularly
- Backup data monthly using admin interface

3. Scaling considerations:

- Vercel automatically scales functions
- Database connections are pooled
- Consider upgrading database plan if needed

Security Notes

1. Environment Variables:

- Never expose DATABASE_URL in client code
- Use strong admin passwords
- Rotate passwords periodically

2. Database Security:

- Use connection pooling
- Enable SSL connections
- Restrict database access by IP if possible

3. Admin Access:

- Consider implementing proper OAuth
- Log admin actions
- Use HTTPS only

Support & Updates

- Documentation: This guide and maintenance guide
- Issues: Check Vercel deployment logs
- Updates: Pull latest changes and redeploy
- Backup: Use admin interface to download CSV backups

Deployment Checklist:

- [] Database created and accessible
- [] Code pushed to GitHub
- [] Vercel project created and connected
- [] Environment variables configured
- [] Database schema pushed
- [] Initial data seeded
- [] Main calendar accessible

- [] Admin interface working
- [] Custom domain configured (if applicable)
- [] SSL certificate active
- [] Monitoring enabled