

Render Environment Variables Setup for Cloudinary

Overview

This guide provides step-by-step instructions for configuring Cloudinary environment variables in Render for the CareLinkAI application.

Prerequisites

- Access to Render Dashboard: <https://dashboard.render.com/>
- Cloudinary account with API credentials
- CareLinkAI service deployed on Render

Step-by-Step Instructions

Step 1: Access Render Dashboard

1. Navigate to <https://dashboard.render.com/>
2. Log in with your credentials
3. Locate the **CareLinkAI** service in your dashboard

Step 2: Open Environment Variables

1. Click on your **CareLinkAI** service
2. Navigate to the **Environment** tab in the left sidebar
3. You should see a list of existing environment variables

Step 3: Add Cloudinary Environment Variables

Add the following environment variables one by one:

Variable 1: CLOUDINARY_CLOUD_NAME

- **Key:** `CLOUDINARY_CLOUD_NAME`
- **Value:** `your_cloud_name_here` (get from Cloudinary dashboard)
- **Type:** Secret (recommended)

Variable 2: CLOUDINARY_API_KEY

- **Key:** `CLOUDINARY_API_KEY`
- **Value:** `your_api_key_here` (get from Cloudinary dashboard)
- **Type:** Secret (recommended)

Variable 3: CLOUDINARY_API_SECRET

- **Key:** `CLOUDINARY_API_SECRET`
- **Value:** `your_api_secret_here` (get from Cloudinary dashboard)
- **Type:** Secret (**REQUIRED** - this is sensitive)

Variable 4: NEXT_PUBLIC_CLOUDINARY_CLOUD_NAME

- **Key:** `NEXT_PUBLIC_CLOUDINARY_CLOUD_NAME`

- **Value:** `your_cloud_name_here` (same as Variable 1)
- **Type:** Plain (this is public and safe to expose)

Variable 5: CLOUDINARY_URL (Optional)

- **Key:** `CLOUDINARY_URL`
- **Value:** `cloudinary://your_api_key:your_api_secret@your_cloud_name`
- **Type:** Secret (recommended)

Step 4: Save Changes

1. After adding all variables, click **Save Changes** button
2. Render will automatically trigger a new deployment
3. Wait for the deployment to complete (usually 3-5 minutes)

Step 5: Verify Deployment

Check Deployment Logs

1. Go to the **Logs** tab
2. Look for successful deployment messages
3. Check for any Cloudinary-related errors

Expected log entries:

- ✓ Build succeeded
- ✓ Starting service
- ✓ Service is live

Test File Upload

1. Navigate to <https://carelinkai.onrender.com>
2. Log in to the application
3. Try uploading a file:
 - Go to Family Portal → Gallery
 - Click “Upload Photos”
 - Select an image and upload
 - Verify the image appears in the gallery
4. Alternative test - Upload a document:
 - Go to Operator Dashboard → Residents
 - Select a resident
 - Go to Documents tab
 - Upload a test document
 - Verify the document appears

Verify in Cloudinary Dashboard

1. Log in to Cloudinary: <https://console.cloudinary.com/>
2. Go to **Media Library**
3. Check for newly uploaded files under the `carelinkai/` folder
4. Verify files are stored correctly

Troubleshooting

Issue: Environment variables not taking effect

Solution:

1. Clear Render's build cache:
 - Go to Settings → Build & Deploy
 - Click "Clear Build Cache"
 - Trigger manual deploy
1. Restart the service:
 - Go to Manual Deploy
 - Click "Clear build cache & deploy"

Issue: Upload fails with "Cloudinary not configured"

Possible Causes:

- Environment variables not saved
- Service not redeployed after adding variables
- Typo in variable names

Solution:

1. Double-check variable names (case-sensitive)
2. Verify all 5 variables are present
3. Trigger a manual redeploy
4. Check deployment logs for errors

Issue: 401 Unauthorized Error

Possible Causes:

- Incorrect API credentials
- API secret mismatch
- Cloud name typo

Solution:

1. Verify credentials in Cloudinary dashboard
2. Check for extra spaces in values
3. Ensure cloud name is exact (e.g., `dygtsnu8z` not `dygtsnud8`)
4. Regenerate API credentials if needed

Issue: Files not appearing in Cloudinary

Possible Causes:

- Wrong cloud name
- Incorrect folder structure
- API key/secret mismatch

Solution:

1. Check Cloudinary dashboard for correct cloud name
2. Verify credentials match your account
3. Test with the connection script locally first

Security Notes

Important Security Considerations

1. **Never commit credentials to git**
 - `.env` file is gitignored
 - Always use environment variables in production
2. **Use “Secret” type for sensitive values**
 - `CLOUDINARY_API_SECRET` must be Secret
 - `CLOUDINARY_URL` should be Secret
 - `CLOUDINARY_API_KEY` should be Secret
3. **Only use “Plain” for public values**
 - `NEXT_PUBLIC_CLOUDINARY_CLOUD_NAME` is safe as Plain
 - This is exposed to the browser intentionally
4. **Rotate credentials periodically**
 - Update Cloudinary API credentials every 6-12 months
 - Update both Cloudinary and Render when rotating
5. **Monitor usage**
 - Check Cloudinary usage reports
 - Set up alerts for unusual activity
 - Monitor bandwidth and storage limits

Rollback Procedure

If you need to rollback the Cloudinary integration:

1. **Remove Environment Variables** (if needed):
 - Go to Environment tab in Render
 - Delete Cloudinary-related variables
 - Save changes
2. **Redeploy Previous Version:**
 - Go to Deploys tab
 - Find the last successful deploy before Cloudinary
 - Click “Redeploy” on that version
3. **Verify Application:**
 - Test that application works without Cloudinary
 - File uploads may be disabled or use alternative storage

Additional Resources

- **Render Documentation:** <https://render.com/docs/environment-variables>
- **Cloudinary Documentation:** <https://cloudinary.com/documentation>
- **CareLinkAI Cloudinary Setup:** See `docs/CLOUDINARY_SETUP.md`

Support

If you encounter issues:

1. **Check Render Logs:** Look for specific error messages
2. **Review Cloudinary Status:** <https://status.cloudinary.com/>
3. **Contact Support:**
 - Render Support: <https://render.com/support>
 - Cloudinary Support: <https://support.cloudinary.com/>

Environment Variable Summary

Copy-paste ready format for quick setup:

```
CLOUDINARY_CLOUD_NAME=your_cloud_name_here  
CLOUDINARY_API_KEY=your_api_key_here  
CLOUDINARY_API_SECRET=your_api_secret_here  
NEXT_PUBLIC_CLOUDINARY_CLOUD_NAME=your_cloud_name_here  
CLOUDINARY_URL=cloudinary://your_api_key:your_api_secret@your_cloud_name
```

Note: Replace these placeholders with your actual Cloudinary credentials from your Cloudinary dashboard.

Verification Checklist

Use this checklist after deployment:

- ☐ All 5 environment variables added to Render
- ☐ Variables marked as “Secret” where appropriate
- ☐ Deployment completed successfully
- ☐ No errors in deployment logs
- ☐ Application loads without errors
- ☐ Test file upload in Gallery works
- ☐ Test document upload works
- ☐ Files appear in Cloudinary Media Library
- ☐ Thumbnail generation works
- ☐ File deletion works (if implemented)

Timeline

- **Adding Variables:** 2-3 minutes
- **Render Deployment:** 3-5 minutes
- **Total Setup Time:** ~5-10 minutes

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