

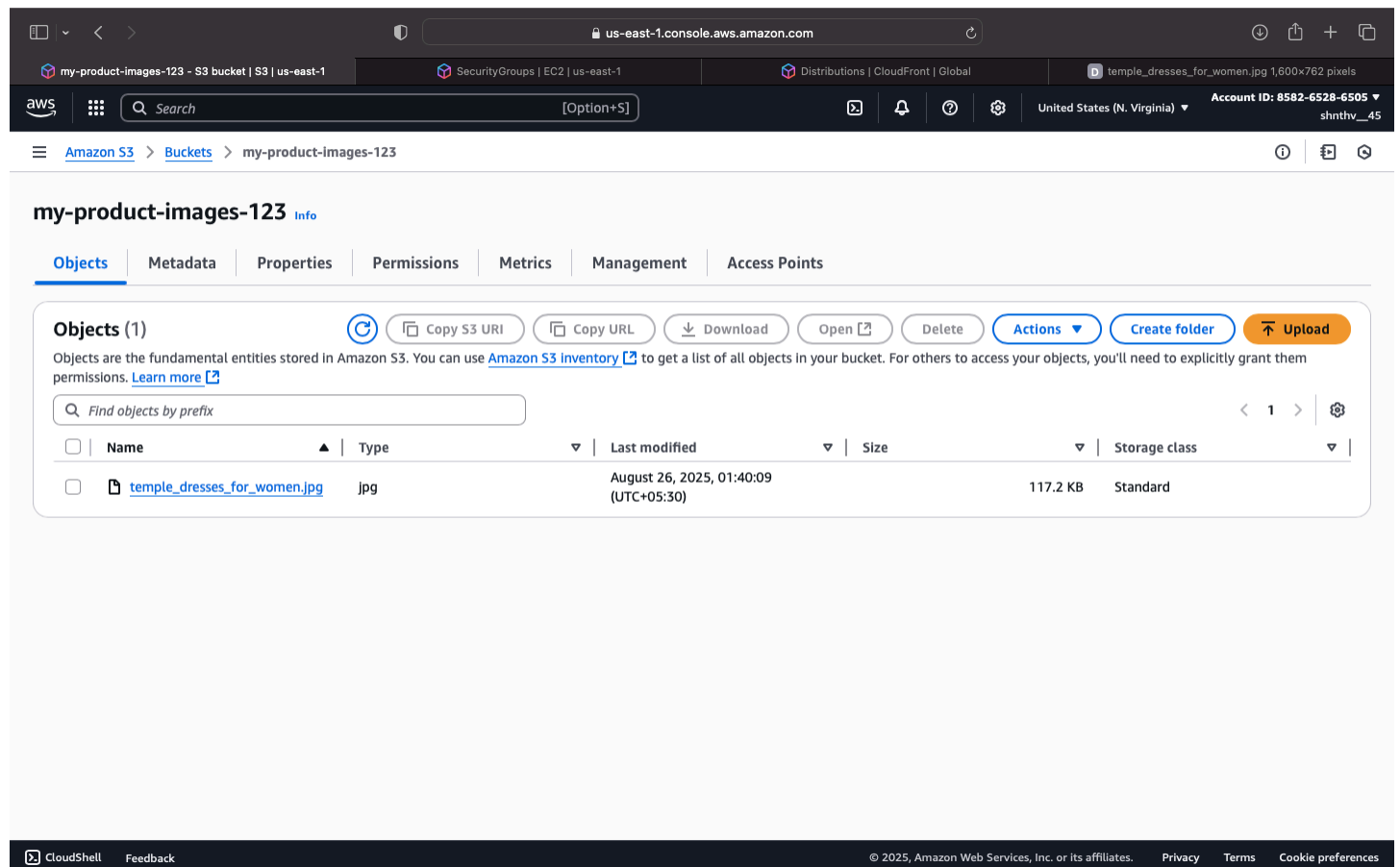
3.Integrate CloudFront with S3 for Faster Content Delivery Configure a CloudFront distribution to serve static assets from S3. Restrict direct S3 access and enforce traffic via CloudFront. Test performance improvements by comparing direct S3 vs. CloudFront load times.

Serve Product Images via S3 and CloudFront

This guide explains how to set up an **Amazon S3 bucket** for product images, create a **CloudFront distribution** to deliver them globally, and use a simple **HTML page** to display images from CloudFront.

Step 1: Create an S3 Bucket

1. Log in to the **AWS Management Console**.
2. Navigate to **S3 → Create Bucket**.
3. Configure the bucket:
 - **Bucket Name:** my-product-images-123 (must be globally unique).
 - **Region:** Closest to your location (e.g., US East – N. Virginia).
 - **Bucket Type:** General Purpose.
 - **Object Ownership:** Bucket owner enforced.
 - **Block Public Access:** Keep **all ON** (CloudFront will manage access).
 - **Default Encryption:** SSE-S3 (Amazon managed).
4. Click **Create Bucket**.

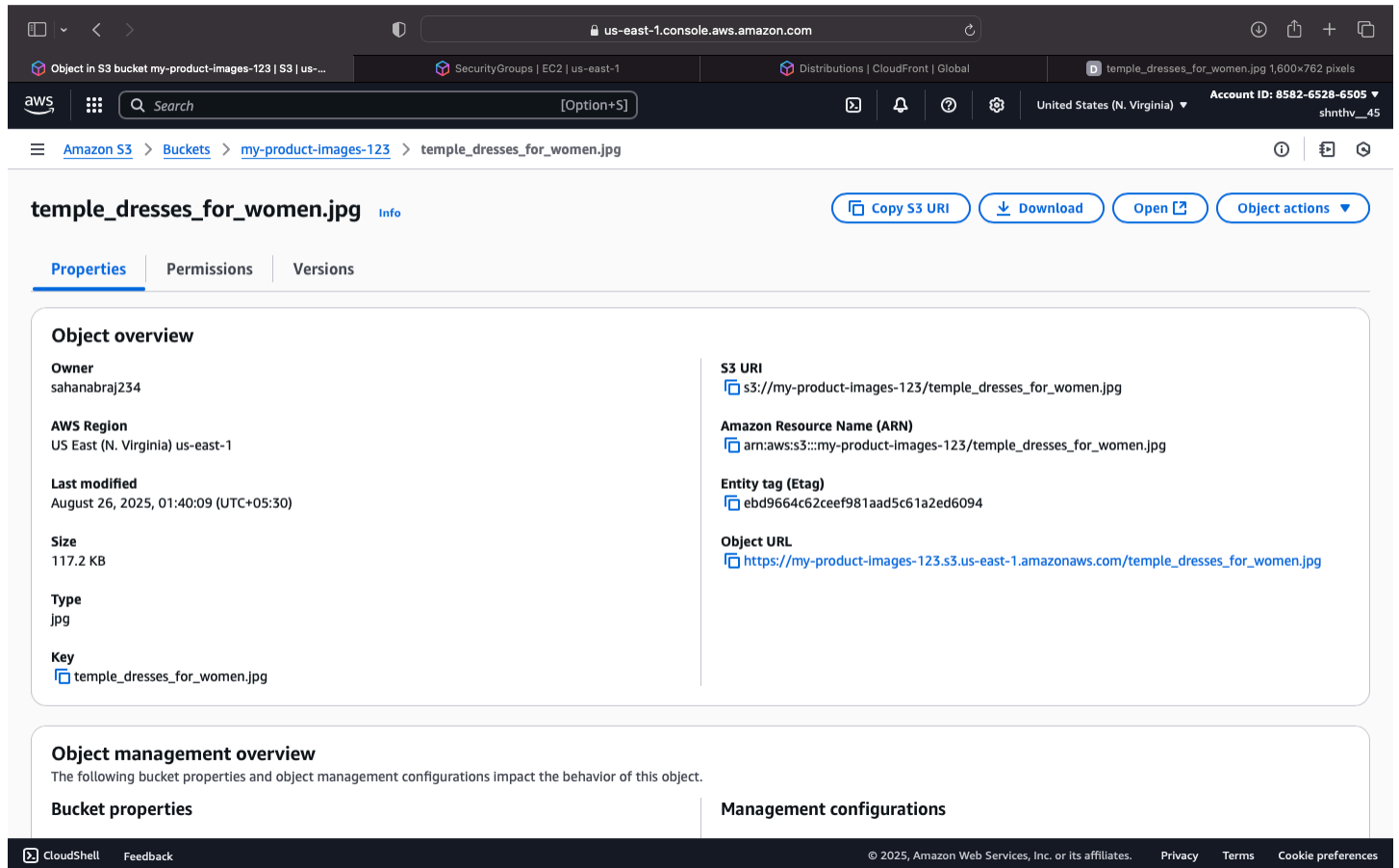


Outcome: A secure S3 bucket ready to store product images.

Step 2: Upload Product Images to S3

1. Open your bucket my-product-images-123.
2. Click **Upload → Add files**.
3. Select your sample product images (e.g., temple_dresses_for_women.jpg, shoes.jpg, etc.).
4. Click **Upload**.

Note: Images remain private. CloudFront will handle secure delivery.



Outcome: Product images are now stored in S3.

Step 3: Create a CloudFront Distribution

1. Go to **CloudFront → Create Distribution**.
2. Configure the distribution:
 - **Distribution Name:** product-images-cf.
 - **Origin Type:** Amazon S3 → select your bucket my-product-images-123.
 - **Grant CloudFront access to origin:** Yes (creates an Origin Access Identity, OAI).
 - **Cache Settings:** Use recommended default settings.
 - **Security Protections:** None (optional).
3. Click **Create Distribution**.
4. Wait 10–15 minutes for deployment.

After deployment, copy the **CloudFront Domain Name**, e.g.:

<https://d2lql293hw7uns.cloudfront.net>

The screenshot shows the AWS CloudFront console interface. The top navigation bar includes the AWS logo, a search bar, and account information (Account ID: 8582-6528-6505). The left sidebar contains a menu with categories like CloudFront, Distributions, Policies, Functions, Static IPs, VPC origins, What's new, SaaS, Telemetry, Reports & analytics, and Security. The main content area displays the configuration for a CloudFront distribution named 'product-images-cf'.

product-images-cf Standard View metrics

General | Security | Origins | Behaviors | Error pages | Invalidations | Tags | Logging

Details

Name product-images-cf	Distribution domain name d2lql293hw7uns.cloudfront.net	ARN arn:aws:cloudfront::858265286505:distribution/E3KOPYWT65SRAE	Last modified August 25, 2025 at 8:01:25 PM UTC
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Settings Edit

Description CloudFront distribution for product images from S3	Alternate domain names - Add domain	Standard logging Off
Price class Use all edge locations (best performance)		Cookie logging Off
Supported HTTP versions HTTP/2, HTTP/1.1, HTTP/1.0		Default root object -

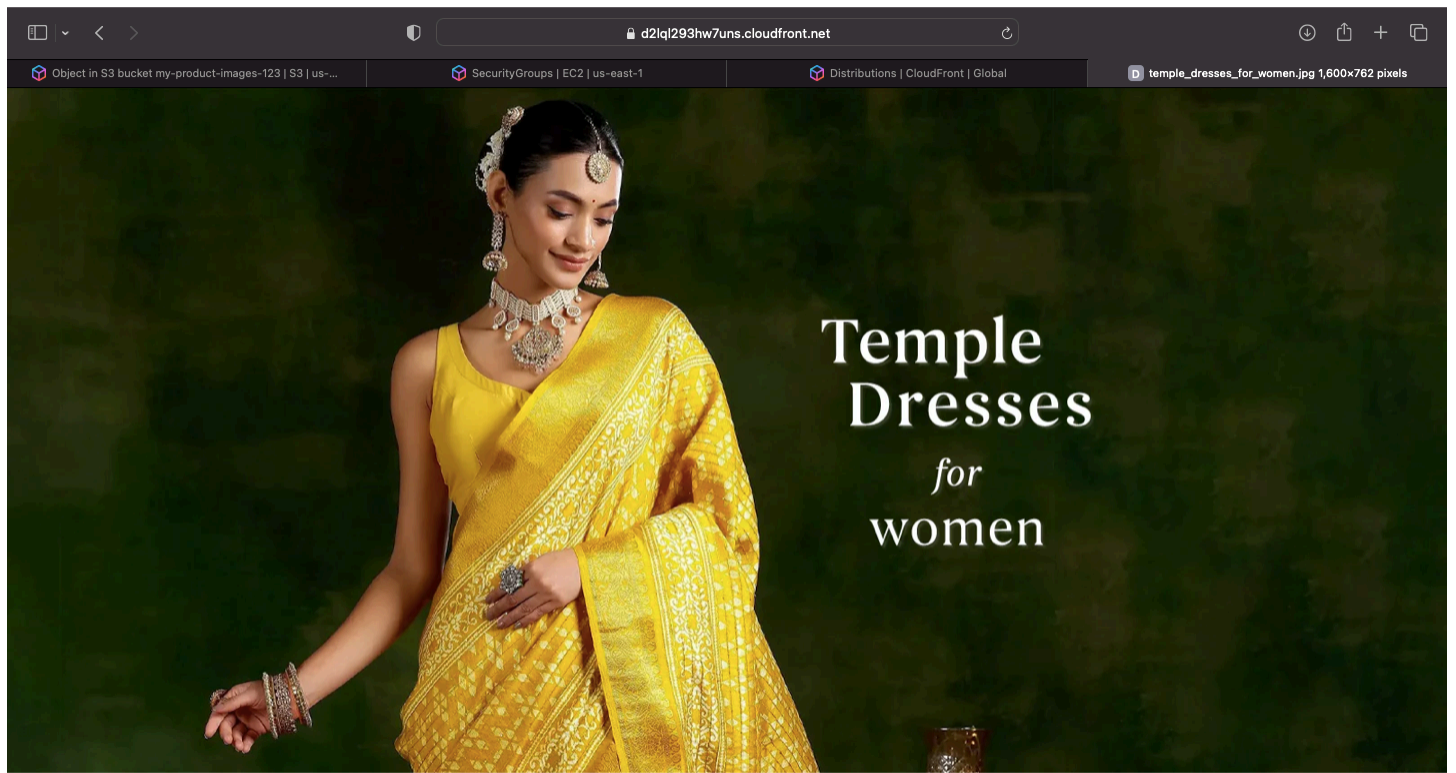
Continuous deployment [Info](#) Create staging distribution

Outcome: CloudFront is ready to deliver your images globally, faster than direct S3 access.

Step 4: Test Images via CloudFront

1. Open a browser.
2. Enter a CloudFront image URL, for example:

https://d2lql293hw7uns.cloudfront.net/temple_dresses_for_women.jpg



The image should load successfully.

Outcome: CloudFront can fetch and serve images securely from S3.

Step 5: How an App Uses CloudFront Images

- Anywhere your app was using a local image, you can **replace it with the CloudFront URL**.
- Example:

```

```

- This makes the app:
 - Load images **faster globally**.
 - Avoid storing large image files on the local server.
 - Securely serve images using CloudFront access policies.

Outcome: The app can now fetch images from CloudFront instead of the local server.