

# Introduction to Amazon CloudFront

## Overview

This guide introduces you to Amazon CloudFront. In this lab you will create an Amazon CloudFront distribution that will use a CloudFront domain name in the url to distribute a publicly accessible image file stored in an Amazon S3 bucket.

## Topics covered

By the end of this lab, you will be able to:

- Create a new Amazon CloudFront distribution
- Use your Amazon CloudFront distribution to serve an image file
- Delete your Amazon CloudFront distribution when it is no longer required

### Amazon CloudFront

Amazon CloudFront is a content delivery web service. It integrates with other Amazon Web Services products to give developers and businesses an easy way

to distribute content to end users with low latency, high data transfer speeds, and no minimum usage commitments.

## Task 1: Store a Publicly Accessible Image File in an Amazon S3 Bucket

In this task, you will store the file that you wish to distribute using Amazon CloudFront in a publicly accessible location. You will store the image file in a publically accessible Amazon S3 bucket.

3. In the **AWS Management Console**, on the **Services** menu, click **S3**.

4. Click **Create bucket** and then configure:

- **Bucket name:**
- Replace **BUCKET** with a random number
- Scroll to the bottom of the screen, then click **Create bucket**


Note: If you receive an error saying that your bucket name is not available, try a different bucket name. For your bucket to work with CloudFront, the name must conform to DNS naming requirements. For more information, go to [Bucket Restrictions and Limitations](#) in the *Amazon Simple Storage Service Developer Guide*.





5. Click on the S3 bucket you created.

6. Click the **Permissions** tab.

7. In the *Block public* access section, click .
8. **Deselect** the **Block all public access** option, and then leave all other options **deselected**.


Notice all of the individual options remain deselected. When deselecting all public access, you must then select the individual options that apply to your situation and security objectives. In a production environment, it is recommended to use the least permissive settings possible.

9. Click 
- A dialogue box opens asking you to confirm your changes.

10. Type  in the field, and then click 
11. Click **Objects** tab.
12. Click 
13. Click 
14. Select an image that you would like to upload.

If you don't have a file prepared, visit a favorite website in your browser and download an image from the website to your desktop. Then choose that file for this step.

- select the checkbox to **acknowledge that existing objects with the same name will be overwritten**

15. Scroll to the bottom of the screen, then click 
16. Click the **file** that you have uploaded.
17. Click the **Permissions** tab.

18. Under **Access control list (ACL)**, click **Edit**.

19. Under **Everyone (public access)**

- Select **Read** for both *Objects* and *Object ACL*.
- Select **I understand the effects of these changes on this object**.
- Click **Save changes**

20. In the **Object Overview** section, copy the value of **key** to a text editor for later use.

This is the name of your file.

21. Copy the value of **Object URL** to a text editor.

22. Paste the Object URL into a new browser tab, then press **Enter**.

This will display your image. It also proves that your content is publicly accessible. However, this is not the URL you will use when you are ready to distribute your content.

## Task 2: Create an Amazon CloudFront Web Distribution

In this task, you will create an Amazon CloudFront web distribution that distributes the file stored in the publicly accessible Amazon S3 bucket.

23. In the **AWS Management Console**, on the **Services** menu, click **CloudFront**.
  24. Click **Create Distribution**
  25. **Origin Domain:** Select the S3 bucket you created
  26. **S3 bucket access:** Select **use OAI (bucket can restrict access to only CloudFront)**
  27. Click on **Create new AOI**
  28. Select newly created AOI in dropdown menu
- Scroll to the bottom of the page, then click **Create Distribution**

The **Status** column shows **In Progress** for your distribution. After Amazon CloudFront has created your distribution, the value of the **Status** column for your distribution will change to **Deployed**. At this point, it will be ready to process requests. This should take around 15-20 minutes. The domain name that Amazon CloudFront assigns to your distribution appears in the list of distributions. It will look similar to *dm2afjy05tegj.cloudfront.net*

Amazon CloudFront now knows where your Amazon S3 origin server is, and you know the domain name associated with the distribution. You can create a link to your Amazon S3 bucket content with that domain name, and have Amazon CloudFront serve it.

## Task 4: Delete Your Amazon CloudFront Distribution

You can clean up your resources by deleting the Amazon CloudFront distribution and the Amazon S3 bucket.

30. In the **AWS Management Console**, select the check box for your CloudFront distribution.

31. At the top of the screen, click **Disable**

32. Click **Yes, Disable**

33. Click **Close**

The value of the **State** column immediately changes to **Disabled**.

34. Wait until the value of the **Status** column changes to **Deployed**.

35. Select the check box for your CloudFront distribution, then configure:

36. Click **Delete** then:

- Click **Yes, Delete**
- Click **Close**

## Task 5: Delete Your Amazon S3 Bucket

37. On the **Services** menu, click **S3**.
38. Click S3 bucket you created.
39. Select your file.
40. Click **Delete**
41. Confirm the deletion by typing
42. Click **Delete objects**
43. On the **Services** menu, click **S3**.
44. Select your bucket again.
45. Click  then:
  - Enter the name of your bucket.
  - Click **Delete bucket**

You have now released the resources used by your CloudFront distribution and Amazon S3 bucket.

## Conclusion

Congratulations! You now have successfully:

- Created a new Amazon CloudFront distribution
- Used your Amazon CloudFront distribution to serve an image file

- Deleted your Amazon CloudFront distribution when it is no longer required