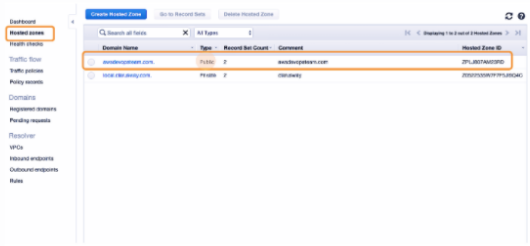
Creating DNS Record Sets

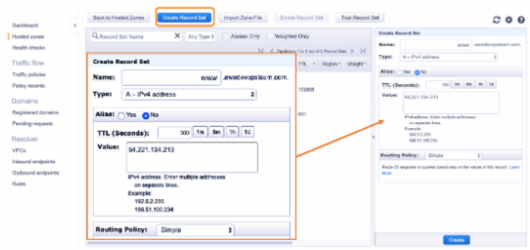
Creating A Record



Hosted Zone Page

Let's create A record to map our web site to associated IP addresses.

First, click **Hosted Zone** on the left-hand menu and then select the **Public Hosted Zone**.



Creating A Record

On the page opened, Click **Create Record Set** tab at the top of the page.

- **Name:**

Here we enter **www**. So we want to reach our web site when entering the browser **wwww.awsdevopsteam.com**. You may not enter anything, this time when you enter **awsdevopsteam.com** you'll see the same page.

- **Type:**

We select the record type as A Record-IPv4 address

- **Alias:**

Leave it as default,**No**

- **TTL (Seconds):**

Default Value 300 is enough.

- **Value:**

We enter **Public IP of EC2 Instance** created in the previous lesson as a webserver.

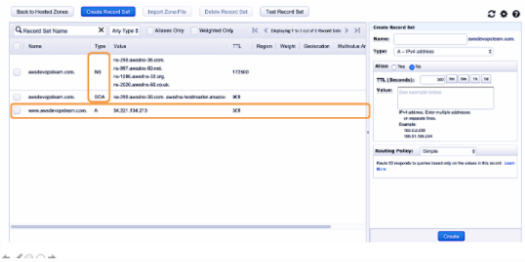
> Creating EC2 Instances for web site

- **Routing Policy:**

We select **Simple** for now.

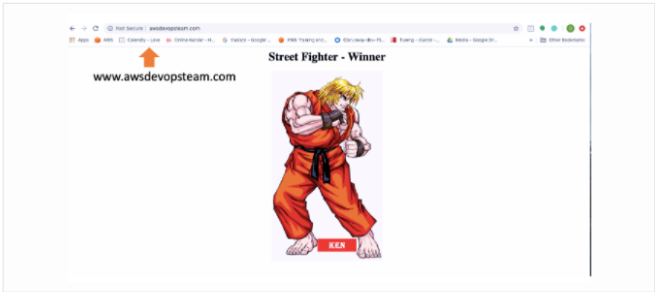
Then click **Create** and it's done.

Checking A Record



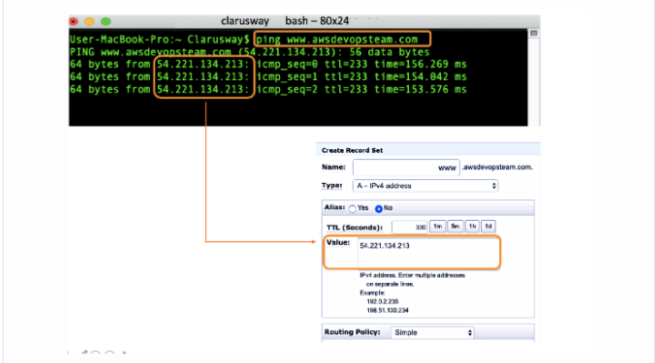
Checking A Record

As you see in the picture above, A record has created and listed together with SOA and NS records.



Web Page Seen on Browser

So when we write a browser www.awsdevopsteam.com or whatever your domain name is you'll see the page seen above.

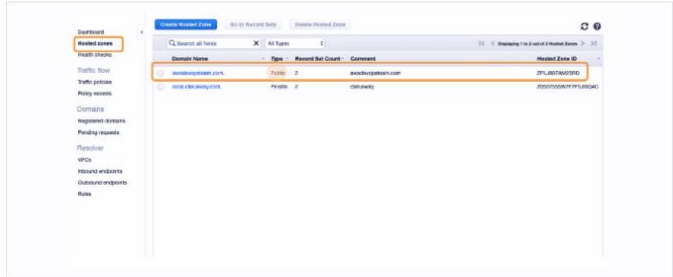


Checking on Terminal

Finally, let's check from the terminal. When writing the command of **ping www.awsdevopsteam.com (your hostname)** on Terminal and press **Enter**. You'll see the IP address of the EC2 instance that we entered as value while creating a record in the previous page.

To stop pinging, press **Ctrl Z**

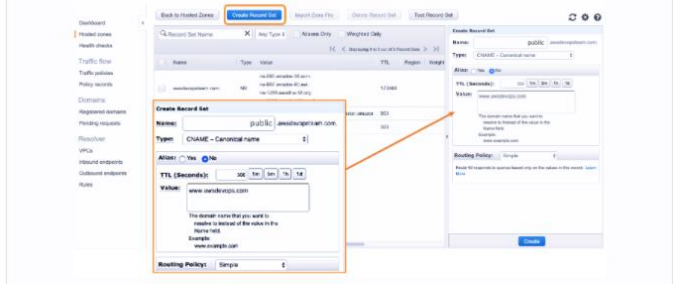
Creating CNAME Record



Hosted Zone Page

Let's give an alias to domain name via CNAME Record.

First, click **Hosted Zone** on the left-hand menu and then select the Public Hosted Zone.



Creating CNAME Record

On the page opened, Click **Create Record Set** tab at the top of the page.

- **Name:**

Here we enter **public**. So, it means we can also reach **www.awsdevopsteam.com** when entering the browser **public.awsdevopsteam.com**.

⚠Avoid ! :
- While creating CNAME record, we can't use naked/root domain (e.g. awsdevopsteam.com or example.com. So cant leave it blank.)

- **Type:**

We select the record type as CNAME

- **Alias:**

Leave it as default,**No**

- **TTL (Seconds):**

Default Value 300 is enough.

- **Value:**

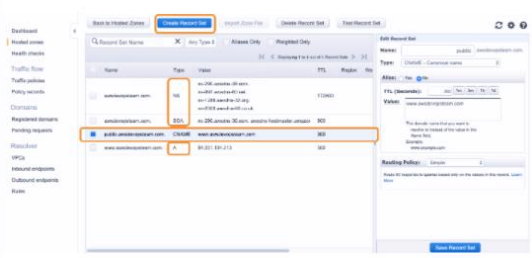
Unlike A record, here we enter a fully qualified domain name(FQDN), **www.example.com**. So, we enter **www.awsdevopsteam.com** as a value.

- **Routing Policy:**

We select **Simple** for now.

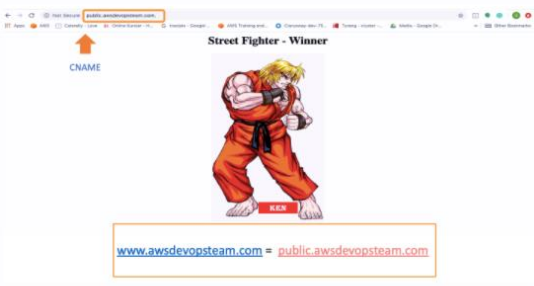
Then click **Create** and It's done.

Checking CNAME Record



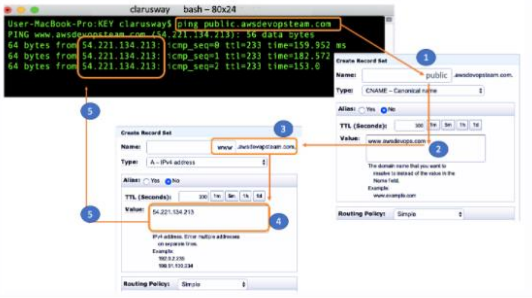
Checking CNAME Record

As you see in the picture above, CNAME Record has been created and listed together with A, SOA and NS records.



Web Page seen on Browser

So when we write a browser **public.awsdevopsteam.com**, or whatever your CNAME is, you'll see **www.awsdevopsteam.com** as seen in the picture above.



Checking on Terminal

Finally, let's check from the terminal. When writing the command of **ping public.awsdevopsteam.com (your CNAME)** on Terminal and press **Enter**, you'll see the IP address of the EC2 instance that we entered as value while creating A record.

To stop pinging, press **Ctrl Z**

In fact, when we hit the **Enter**, **public.awsdevopsteam.com** calls CNAME Record and CNAME calls **www.awsdevopsteam.com**. Finally, we see the IP of **www.awsdevopsteam.com** on the Terminal screen.

Process of Creating Static Website on S3 with Route 53

Process of Creating Static Website on S3 with Route 53

For creating a static website on S3 with Route 53;

First, we'll create a new bucket with the name of our domain

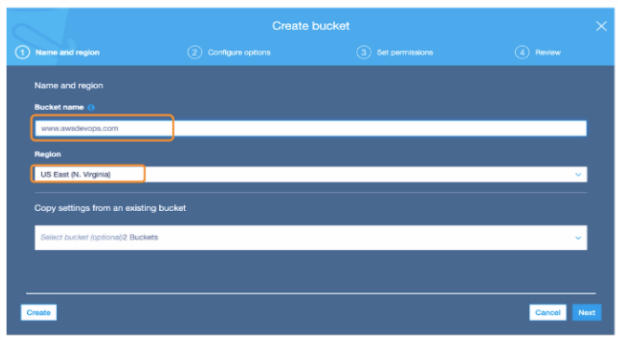
Then, we'll upload our web page in this bucket and give permission to be a static website.

After that, we associate the S3 bucket to Route 53 via Alias record.

Finally, it's ready to be reached from the internet browser.

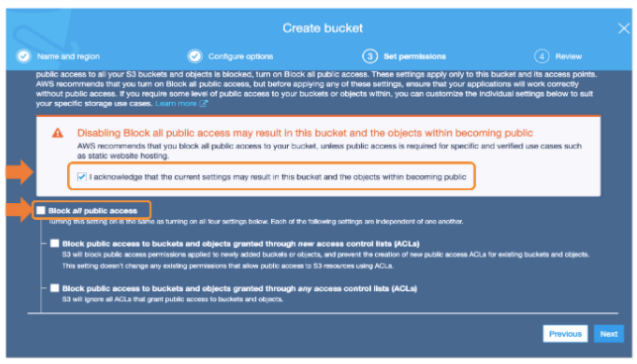
Let's do it on AWS Management Console.

Step-1 Creating Static Website on S3



Create Bucket

- First, go to the S3 services and click **Create Bucket** and name the bucket with the same name as your domain. For example, **www.awsdevopsteam.com** or **awsdevopsteam.com** and then select **N.Virginia** as a region.
- Leave all **Configure Options** as default.

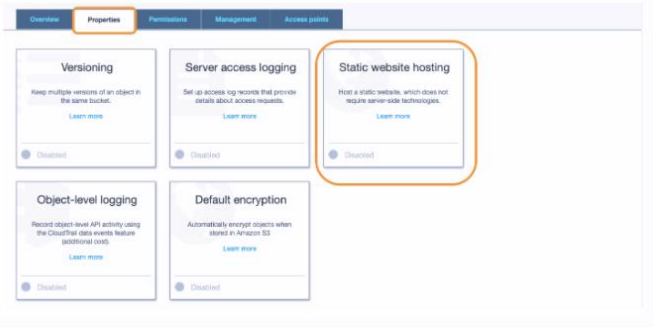


Set Permission

- In **Set Permission Options**, as you see in the picture above, uncheck the **Block all public access** box for making it public and check the **Verifying** box to acknowledge,
- After the overview, click **Create**.

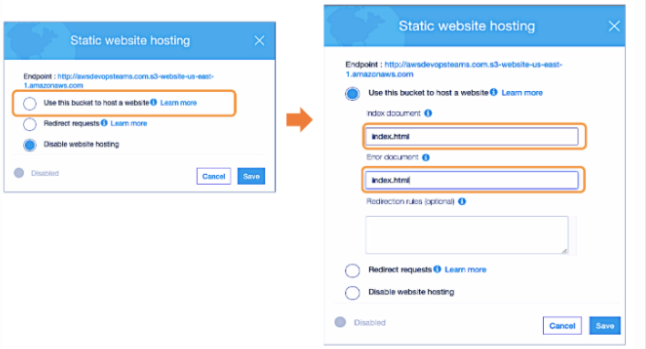
- Then, click on the new bucket and upload 2 files. One of the files is **index.html** and the other one is a picture in **.jpg** format. These are simple website documents.
- After that go to the **Permission** tab and select Bucket Policy and paste the policy that you can find in the link below.

> You can reach and download index.html, .jpeg file and Bucket Policy from this link



Set Properties

- After uploading the files, click **Properties** tab on the top and select the **Static Website Hosting** box.

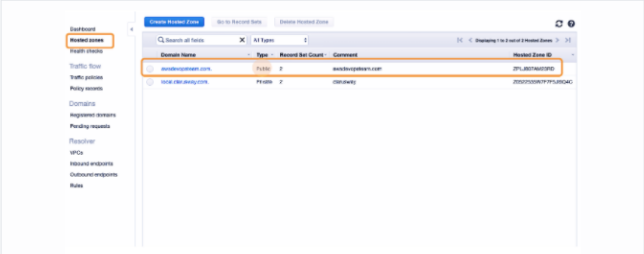


Set Properties

- Here, a window pops up and we click **Use this Bucket to Host a Website** option and enter **index.html** for both **index document** and **error document** blanks. Then press **Save**.

Static Website on S3 is ready. Let's go to Route 53 to make it public on the internet.

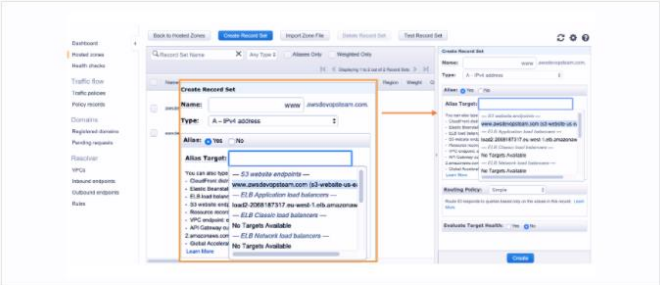
Step-2 Setting Route 53 with Alias Record



Hosted Zone Page

We finish creating a Static Website on S3. Let's create an **Alias Record** to make it public on the internet.

First, click **Hosted Zone** on the left-hand menu and then select the **Public Hosted Zone**.



Creating Alias Record

On the page opened, Click **Create Record Set** tab at the top of the page.

- **Name:**

Here we enter **www**. So, it means we can reach the website located in S3 when entering the browser **www.awsdevopsteam.com**

- **Type:**

We select the record type as **A-IPv4 Address**. As you remember, Alias record can't be created separately. They are embedded in other records (A, PTR, TXT, etc.).

- **Alias:**

We select **Yes**

- **Alias Target:**

Unlike the other records here we enter AWS resources DNS like S3 Website Endpoint, ELB Load Balancer DNS name and CloudFront distribution domain name, etc. We select **S3 Website Endpoint**

- **Routing Policy:**

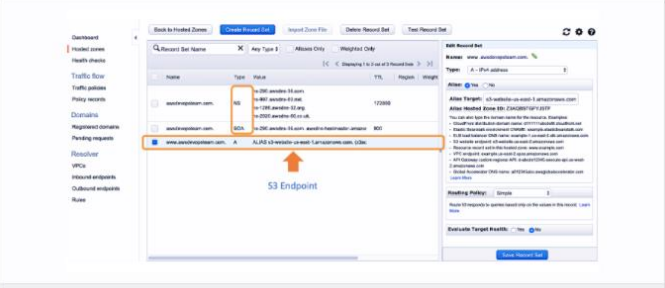
We select **Simple** for now.

- **Evaluate Target Health:**

We select **No**.

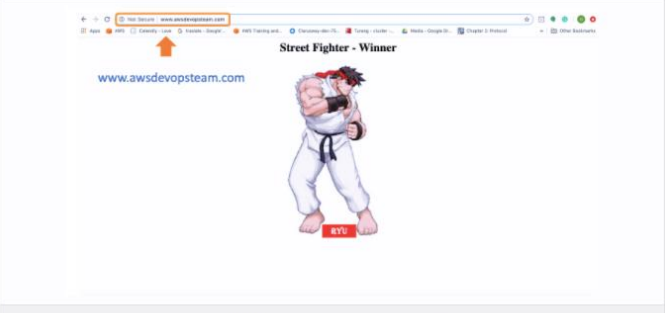
Then click **Create** and It's done.

Checking an Alias Record



Checking an Alias Record

As you see in the picture above, the Alias record has been created and listed together with SOA and NS records.



Web Page Seen on Browser

So when we write a browser **www.awsdevopsteam.com** or whatever your domain name is you'll see the page seen above.