S3, Route 53 & DNS
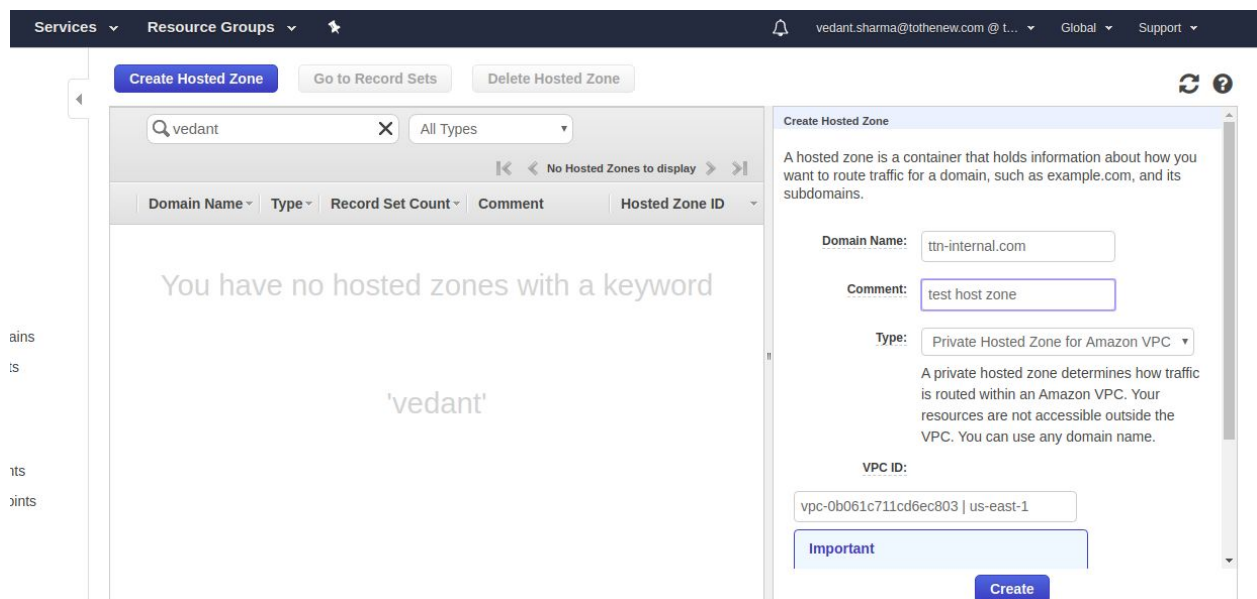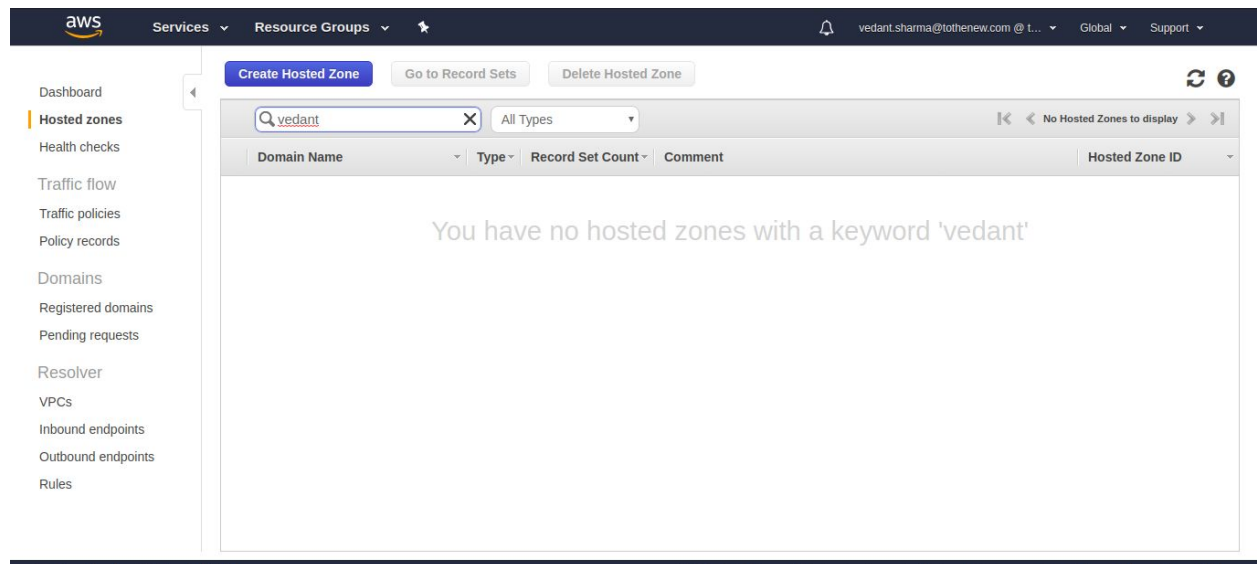
Q1. create a private hosted zone named "ttn-internal.com", and created a cname record "myloadbalance.ttn-internal.com" for any load balancer pointed to its dns. Do reverse lookup for the record from any instance of the vpc and share the result.

Creating a hosted zone:

Enable Dns resolution:

Enable DNS hostname

Creating a record set:
Of type cname to map a DNS to a DNS
Where we mark the address of load balancer

Back to Hosted Zones   Create Record Set   Import Zone File   Delete Record Set   Test Record Set   ⟳ ⚙ ❓

🔍 Record Set Name   ✕   Any Type ▾   ☐ Aliases Only   ☐ Weighted Only

|◄ ◄ Displaying 1 to 2 out of 2 Record Sets ► ►|

Create Record Set

Name: [myloadbalance] .ttn-internal-1.com.

Type: [CNAME – Canonical name   ▾]

Alias: ○ Yes ● No

TTL (Seconds): [300] [1m] [5m] [1h] [1d]

Value: vedant-temp-ALb-69142369.us-east-
1.elb.amazonaws.com

The domain name that you want to
resolve to instead of the value in the
Name field.
Example:
www.example.com

Routing Policy: [Simple   ▾]

Route 53 responds to queries based only on the values in this record. Learn
More

	Name	Type	Value	Evaluate Target Health
☐	ttn-internal-1.com.	NS	ns-1536.awsdns-00.co.uk. ns-0.awsdns-00.com. ns-1024.awsdns-00.org. ns-512.awsdns-00.net.	-
☐	ttn-internal-1.com.	SOA	ns-1536.awsdns-00.co.uk. awsdns-hostmaster.amaz	-

Create

Back to Hosted Zones   Create Record Set   Import Zone File   Delete Record Set

🔍 Record Set Name   ✕   Any Type ▾   ☐ Aliases Only   ☐ Weighted Only

|◄ ◄ Displaying 1 to 3 out of 3 Record Sets ► ►|

	Name	Type	Value	Evalua
☐	ttn-internal-1.com.	NS	ns-1536.awsdns-00.co.uk. ns-0.awsdns-00.com. ns-1024.awsdns-00.org. ns-512.awsdns-00.net.	-
☐	ttn-internal-1.com.	SOA	ns-1536.awsdns-00.co.uk. awsdns-hostmaster.amaz	-
☐	myloadbalance.ttn-internal-1.com.	CNAME	vedant-temp-ALb-69142369.us-east-1.elb.amazona	-

Nslookup on the instance running on a load balancer;

Q2. Create a non-public S3 bucket and give appropriate permissions to a server to download objects from bucket but not to put or delete anything in it.

Creating a private bucket:

Creating an add object policy for s3 bucket and specifying s3 bucket ARN
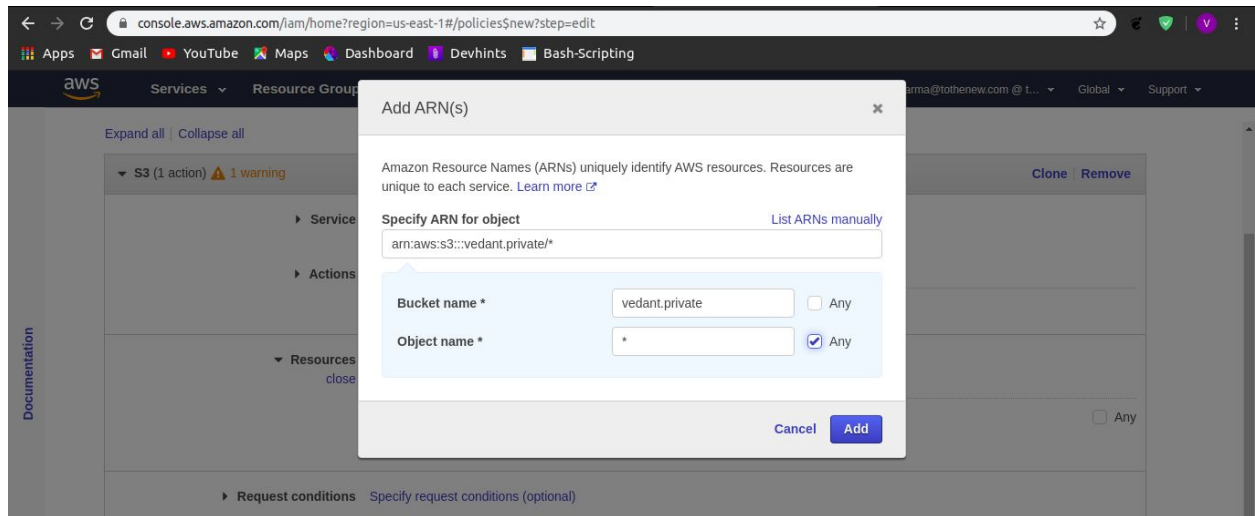
Adding role for ec2 usecase.

Create role   ① ② ③ ④

Review

Provide the required information below and review this role before you create it.

Role name* | Vedant-Object-download-only |

Use alphanumeric and '+=,.@-_' characters. Maximum 64 characters.

Role description   Allows EC2 instances to call AWS services on your behalf.

Maximum 1000 characters. Use alphanumeric and '+=,.@-_' characters.

Trusted entities   AWS service: ec2.amazonaws.com

Policies   Vedant-object-download ☑

Permissions boundary   Permissions boundary is not set

* Required   Cancel   Previous   Create role

Attaching the role to the Ec2 instance:

Launch Instance ▼   Connect   Actions ▾   🧪 ↻ ⚙ ❓

🔍 search : vedant ✕   Add filter   ❓ |< < 1 to 3 of 3 > >|

☐	Name ▲	Instance ID ▾	Instance Type ▾	Availability Zone ▾	Instance State ▾	Status Checks ▾	Alarm Status	Public DNS (IPv4) ▾	I
☑	Vedant-Insta...	i-0392		us-east-1c	🟢 running	✅ 2/2 checks ...	None	ec2-204-236-192-13.co...	2
☐	Vedant-temp...	i-0826		us-east-1a	🔴 terminated		None		-
☐	Vedant-temp...	i-0f18		us-east-1a	🔴 terminated		None		-

Connect
Get Windows Password
Create Template From Instance
Launch More Like This
Instance State   ▶
Instance Settings   ▶   Add/Edit Tags
Image   ▶   Attach to Auto Scaling Group
Networking   ▶   Attach/Replace IAM Role
CloudWatch Monitoring   ▶   Change Instance Type

Attach/Replace IAM Role

Select an IAM role to attach to your instance. If you don't have any IAM roles, choose Create new IAM role to create a role in the IAM console.
If an IAM role is already attached to your instance, the IAM role you choose will replace the existing role.

Instance ID   i-0392e6fd65fdf1c99 (Vedant-Instance) ⓘ

IAM role* | Vedant-Object-download-only   ▾ | C   Create new IAM role ⓘ

* Required   Cancel   Apply

```
ubuntu@ip-172-31-84-228:~$ aws s3 ls

An error occurred (AccessDenied) when calling the ListBuckets operation: A
ccess Denied
ubuntu@ip-172-31-84-228:~$ ▮
```

Downloading the s3 object using s3api:

```
ubuntu@ip-172-31-84-228:~$ aws s3api get-object --bucket vedant.private --
key "Dockerfile" dock1.txt
{
    "AcceptRanges": "bytes",
    "LastModified": "Tue, 03 Mar 2020 10:13:46 GMT",
    "ContentLength": 343,
    "ETag": "\"25b11f7cd8787ecb2915b430369348ed\"",
    "ContentType": "binary/octet-stream",
    "Metadata": {}
}
```

```
ubuntu@ip-172-31-84-228:~$ cat dock1.txt
FROM ubuntu
MAINTAINER Vedant
RUN apt-get update
RUN apt-get -y install nginx
RUN apt-get -y install apt-utils vim wget curl net-tools -y
RUN rm /etc/nginx/sites-enabled/default
COPY chirag.com /etc/nginx/sites-available
RUN ln -s /etc/nginx/sites-available/chirag.com /etc/nginx/sites-enabled
EXPOSE 80
CMD [ "nginx", "-g", "daemon off;"  ]

ubuntu@ip-172-31-84-228:~$
```