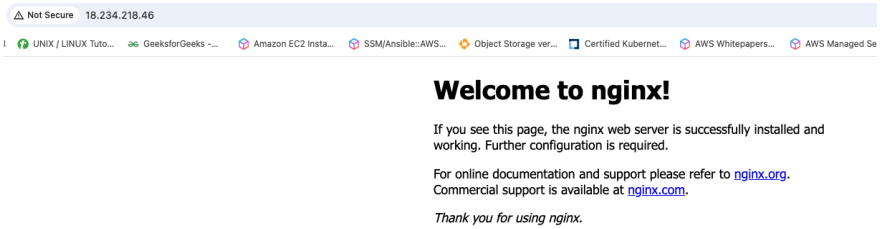
SERVER MIGRATION USING AWS APPLICATION MIGRATION SERVICE

STEP 1:

- Launch an EC2 instance using the below details
  - AMI = Amazon Linux 2
  - Subnet = Public
  - User Data
    - ```
      #!/bin/bash
      sudo yum update -y
      sudo amazon-linux-extras install nginx1 -y
      sudo systemctl enable nginx
      sudo systemctl start nginx
      ```
  - Tag your instance
  - Security Group: Port 80 and 22
  - Launch with a key pair.
  - Once the instance is ready, copy public IP on a web browser and confirm if you can see the ngnix welcome page.
  - SSH into the server and create a test file and test directory

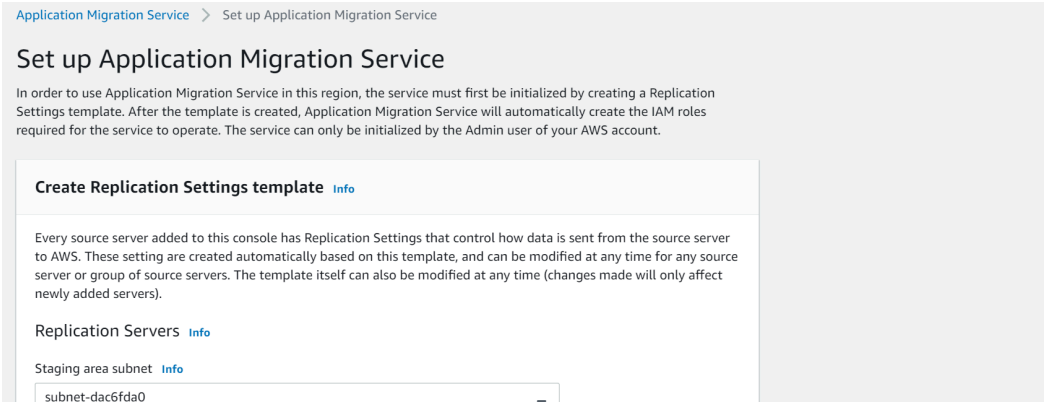


  - SSH into the server and create a test file and test directory

STEP 2:

- **Initialize MGN and Create Replication settings template**
  the 1st setup step (for 1st time using MGN is to initialize the service)
      ```

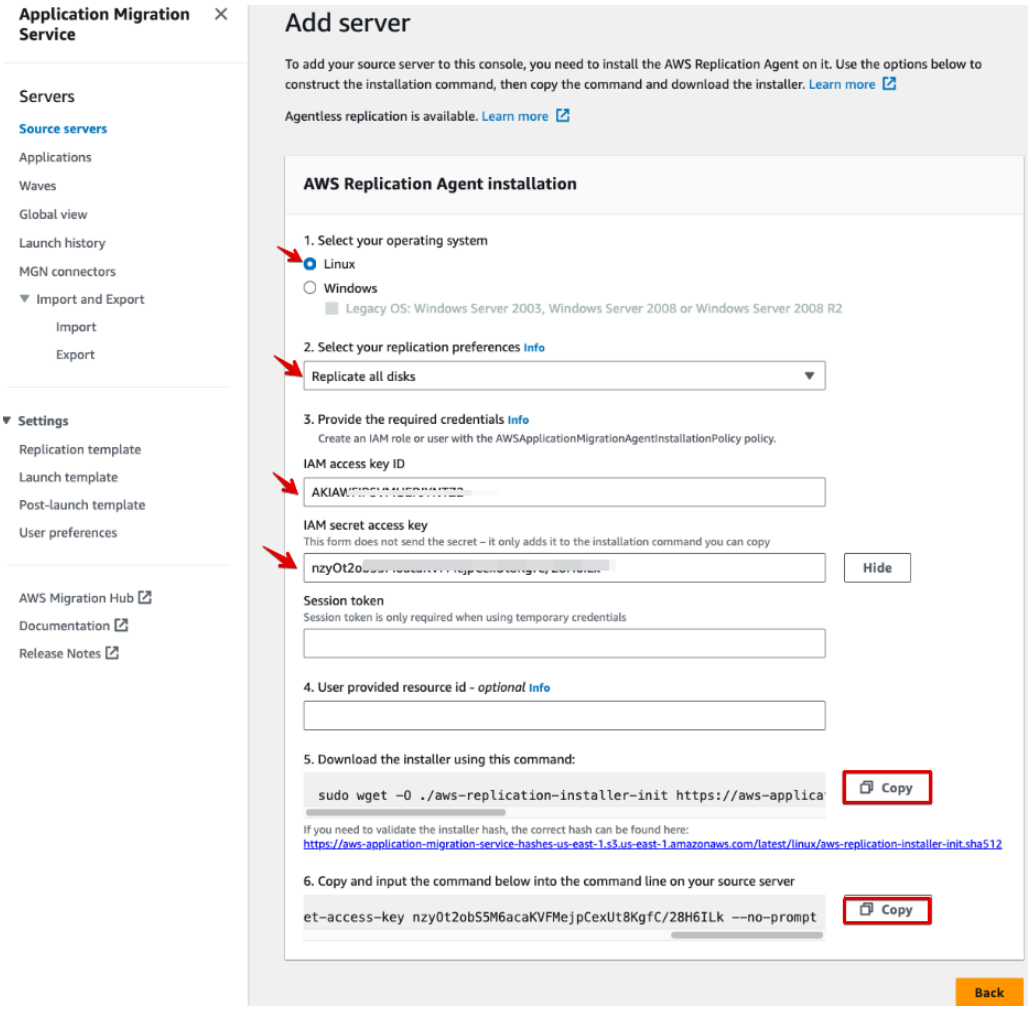
- Switch to MGN on the AWS console and click **Get Started**. this will prompt you to initialize the service.
- click on **Set up service** to Initialize and Create a Replication Settings template.
- Subnet = Public subnet (Preferably in the same VPC as source instance to avoid troubleshooting networking or creating peering connections)
- Instance type = t2.micro
- Security Group = Always use Application Migration Service security group

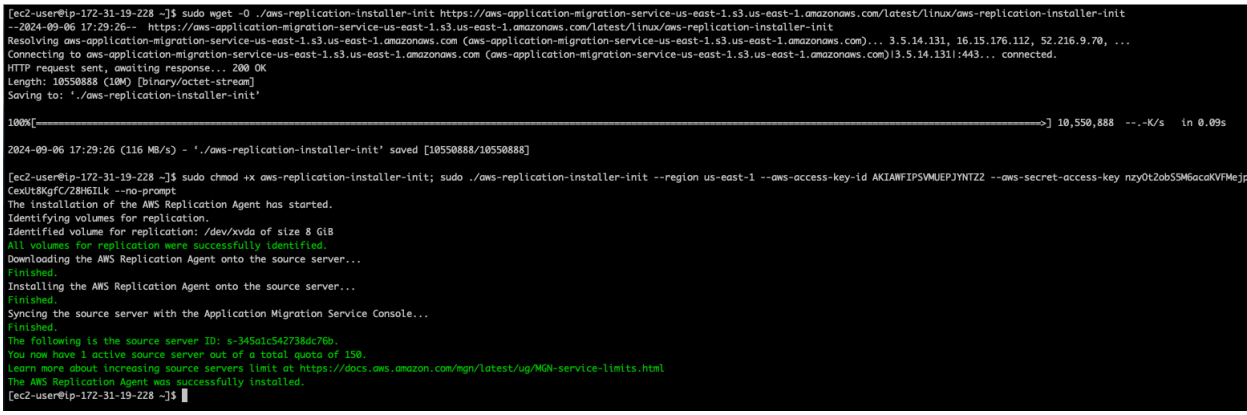


- If your replication settings template is already created, you can make changes by going into settings.

- **Add a Source Server.**
  In order to add source servers,
  - On the MGN console, navigate to Source servers and click on **Add server**. this will open window to help generate the agent installer based on your O.S
    - Select Operating system: Linux
    - select your replication preferences: Replicate all disks
    - provide Access key / Secret Keys of a user with appropriate permissions
    - copy the generate commands on the console **(5)** and (6) and run on your ec2-instance.

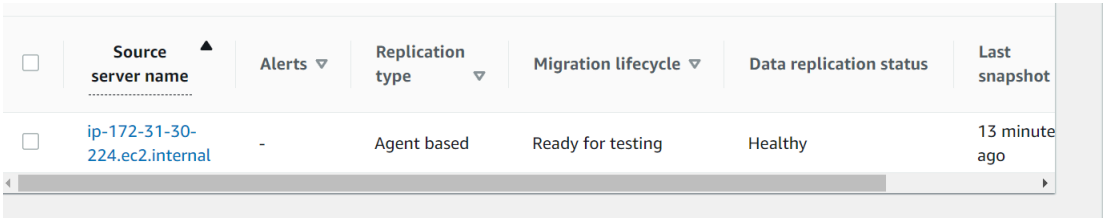
This downloads and installs the Agent on the server.





- After Running the commands, we will find the source server will appear on the console like below.

- Give it some time for replication to complete and the Migration life cycle shows **Ready for testing**.



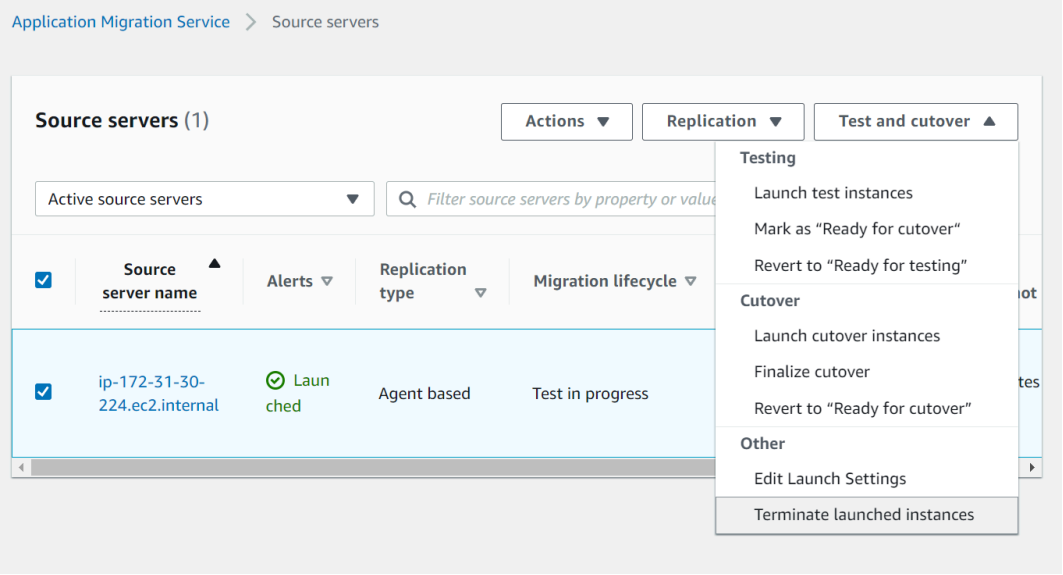
Source server name	Alerts	Replication type	Migration lifecycle	Data replication status	Last snapshot
ip-172-31-30-224.ec2.internal	-	Agent based	Ready for testing	Healthy	13 minute ago

STEP 3: Edit Launch settings

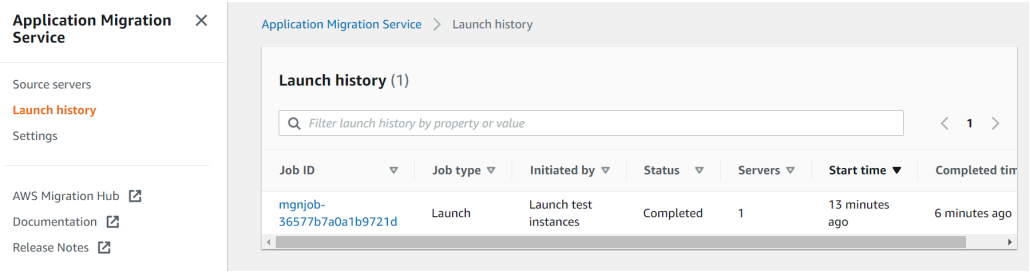
- Go to MGN, select the server, click on Test and cutover and click on edit launch settings.
- Make all changes in the launch template on Networking and Security groups
- Create a new version of the template
- Select Launch template and set the default version to the latest version

STEP 4: Launch test instance

- Select the server and click on Test and cut over and select launch test instances.



- It will create a test instance and marked it as Ready for cutover. To see this, click on Launch history.



- Under the launch history we will be able to see a job, click on the job and see the logs.

Job log Info

Filter job log by property or value

1 2

Time	Event	Additional data
April 10, 2022, 17:19 (UTC+5:30)	Job started	
April 10, 2022, 17:19 (UTC+5:30)	Started taking snapshot	Source server : ip-172-31-30-224.ec2.internal
April 10, 2022, 17:20 (UTC+5:30)	Finished taking snapshot	Source server : ip-172-31-30-224.ec2.internal
April 10, 2022, 17:20 (UTC+5:30)	Conversion started	Source server : ip-172-31-30-224.ec2.internal
April 10, 2022, 17:23 (UTC+5:30)	Conversion ended	Source server : ip-172-31-30-224.ec2.internal Conversion Server instance ID: i-0e4087d7d90027119
April 10, 2022, 17:23 (UTC+5:30)	Started launching test/ cutover EC2 instance	Source server : ip-172-31-30-224.ec2.internal
April 10, 2022, 17:26 (UTC+5:30)	Successfully launched test/ cutover EC2 instance	Source server : ip-172-31-30-224.ec2.internal Test/ cutover instance ID: i-

Source servers (1)

Filter source servers by property or value

1

Source server name	Status
ip-172-31-30-224.ec2.internal	Launched

STEP 5: TEST

- To verify, go to ec2 console, and see the launched server.

ip-172-31-30-224.ec2.internal i-0c842890f0b5a1df8 Running c4.large 2/2 chec

Instance: i-0c842890f0b5a1df8 (ip-172-31-30-224.ec2.internal)

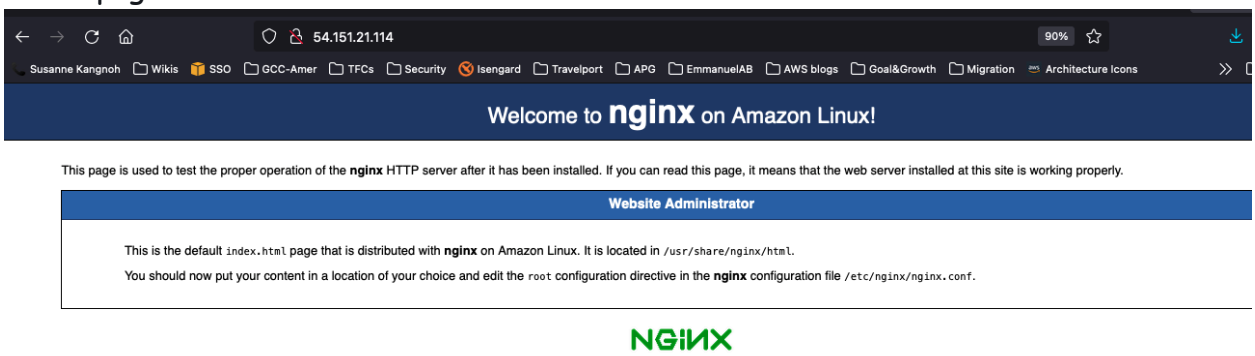
Select an instance above

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

▼ Security details

IAM Role	Owner ID	Launch time
SSMDefaultRoleForPVREReporting	186433656069	Sun Apr 10 2022 17:26:56 GMT+0530 (India

Copy the public IP and place in a web browser to see your Ngnix test page.



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- To verify the data login inside the server, SSH and check the file you created in the source server.

Once testing is done you can launch cut over instances.