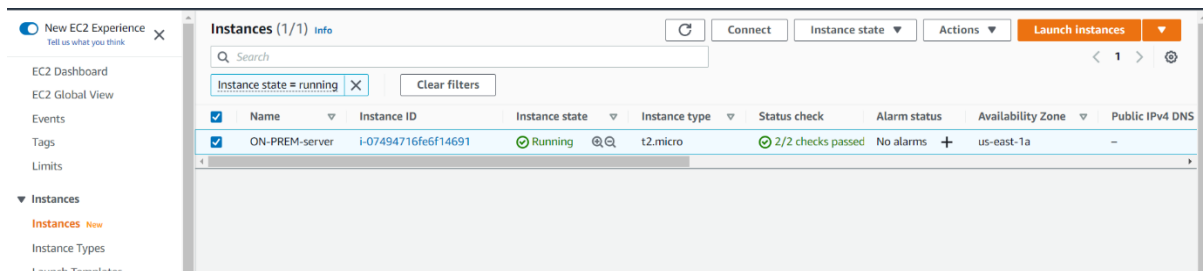


PROJECT-2

Migrate server from on prem to AWS . [Hint : Consider on prem to be a different AWS region]

STEP 1---CREATING EC2 INSTANCE WITH CUSTOM VPC




STEP 2---CONFIGURING APACHE AND DEPLOTING APPLICATION TO THE SERVER

```

Type 'help' to learn how to use Xshell prompt.
[Ctrl]-[J] ssh -i "Master.pem" ec2-user@54.236.55.217

Connecting to 54.236.55.217:22...
Connection established.
To escape to local shell, press 'Ctrl+Alt]'.

WARNING: The remote SSH server rejected X11 forwarding request.

 Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-42-0-1-185 ~]$ sudo su
[root@ip-42-0-1-185 ec2-user]# cd
[root@ip-42-0-1-185 ~]# ls
[root@ip-42-0-1-185 ~]# yum install httpd
Loaded plugins: extras, suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package httpd.x86_64 0:2.4.54-1.amzn2 will be installed
--> Processing Dependency: httpd-tools = 2.4.54-1.amzn2 for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: httpd filesystem = 2.4.54-1.amzn2 for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: system-logs-httpd for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: modhttpd for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: httpd filesystem for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: /etc/mime.types for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: libaprutil1.so.0(i686) for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: libapr-1.so.0(i686) for package: httpd-2.4.54-1.amzn2.x86_64
--> Running transaction check
--> Package apr.x86_64 0:1.7.0-9.amzn2 will be installed
--> Package apr-util.x86_64 0:1.6.1-5.amzn2.0.2 will be installed
--> Processing Dependency: apr-util-bdb(x86_64) = 1.6.1-5.amzn2.0.2 for package: apr-util-1.6.1-5.amzn2.0.2.x86_64
--> Package generic-logs-httpd.noarch 0:18.0.0.4.amzn2 will be installed
--> Package httpd filesystem.noarch 0:2.4.54-1.amzn2 will be installed
--> Package httpd tools.x86_64 0:2.4.54-1.amzn2 will be installed
--> Package mailcap.noarch 0:2.1.41-2.amzn2 will be installed

```

```

154.236.55.217:22 +
inflating: html/js/popper.min.js
inflating: html/js/slider-setting.js
inflating: html/medicine.html
inflating: html/news.html
[root@ip-42-0-1-185 html]# ls
html  murga.zip
[root@ip-42-0-1-185 html]# cp -r /var/www/html/html/* /var/www/html
cp: cannot stat '/var/www/html/html/*': No such file or directory
[root@ip-42-0-1-185 html]# cd /html
bash: cd: /html: No such file or directory
[root@ip-42-0-1-185 html]# ls
html  murga.zip
[root@ip-42-0-1-185 html]# cd html
[root@ip-42-0-1-185 html]# ls
client.html  contact.html  css  health.html  images  index.html  js  medicine.html  news.html

```

STEP 3---CREATING APPLICATION MIGRATION SERVICE

Application Migration Service

Source servers

Source servers

Launch history

Settings

AWS Migration Hub

Documentation

Release Notes

Windows Migration Accelerator (WMA) Program

If you are migrating 40 or more servers per month (including at least 14 Windows servers), you may qualify for up to \$250 credit per server by joining the WMA program. [Learn more](#)

Migration tip #8

Want to learn some best practices for migrating your applications using MGN? [Learn more](#)

☐ Hide future tips

Source servers (1)

Actions

Replication

Test and cutover

Active source servers

Filter source servers by property or value

< 1 >

<input type="checkbox"/>	Source server name	Alerts	Replication type	Migration lifecycle	Data replication status	Last snapshot	Next step
<input type="checkbox"/>	ip-42-0-1-185.ec2.internal	-	Agent based	Ready for testing	Healthy	5 minutes ago	Launch test instance

STEP 4---INSTALLING AGENT ON PREM SERVER

```

154.236.55.217:22
inflat: html/js/popper.min.js
inflat: html/js/slider-setting.js
inflat: html/medicine.html
inflat: html/news.html
[root@ip-42-0-1-185 html]# ls
html  margo.zip
[root@ip-42-0-1-185 html]# cp -r /var/www/html/html/* /var/www/html
cp: cannot stat '/var/www/html/html/*': No such file or directory
[root@ip-42-0-1-185 html]# cd /html
bash: cd: /html: No such file or directory
[root@ip-42-0-1-185 html]# ls
html  margo.zip
[root@ip-42-0-1-185 html]# cd html
[root@ip-42-0-1-185 html]# ls
client.html contact.html css health.html images index.html js medicine.html news.html
[root@ip-42-0-1-185 html]# cp -r /var/www/html/html/* /var/www/html
[root@ip-42-0-1-185 html]# wget -O - ./aws-replication-installer-init.py https://aws-application-migration-service-us-west-2.s3.us-west-2.amazonaws.com/latest/linux/aws-replication-installer-init.py
--2022-08-03 06:22:32-- https://aws-application-migration-service-us-west-2.s3.us-west-2.amazonaws.com/latest/linux/aws-replication-installer-init.py
Resolving aws-application-migration-service-us-west-2.s3.us-west-2.amazonaws.com (aws-application-migration-service-us-west-2.s3.us-west-2.amazonaws.com)... 52.92.212.42
Connecting to aws-application-migration-service-us-west-2.s3.us-west-2.amazonaws.com (aws-application-migration-service-us-west-2.s3.us-west-2.amazonaws.com)|52.92.212.42|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 14387 (14K) [binary/octet-stream]
Saving to: './aws-replication-installer-init.py'

100%[=====] 14,387 --.-K/s in 0s

2022-08-03 06:22:32 (173 MB/s) - './aws-replication-installer-init.py' saved [14387/14387]

[root@ip-42-0-1-185 html]# sudo python3 aws-replication-installer-init.py --region us-west-2 --aws-access-key-id AKIAVD6M6HFO0IF7PI7B --aws-secret-access-key 2tzvB+RbC3BlSdy0gamFdcumXs6ZfyGfn75oIXro --no-promp
t
The installation of the AWS Replication Agent has started.
Identifying volumes for replication.
Identified volume for replication: /dev/xvda of size 8 GiB
The AWS Replication Agent was successfully identified.
Downloading the AWS Replication Agent onto the source server... Finished.
Installing the AWS Replication Agent onto the source server... Finished.
Syncing the source server with the Application Migration Service Console... Finished.
The following is the source server ID: i-0adff02a02704b6
You now have 1 active source server out of a total quota of 20.
Learn more about increasing source servers limit at https://docs.aws.amazon.com/mgn/latest/ug/PMN-service-limits.html
The AWS Replication Agent was successfully installed.
[root@ip-42-0-1-185 html]#

```

STEP 5---MODIFYING THE CONFIGURATION OF SOURCE SERVER

▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name

master-silicon

Create new key pair

▼ Network settings [Get guidance](#)

Subnet info

Don't include in launch template

Create new subnet

When you specify a subnet, a network interface is automatically added to your template.

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Select existing security group

Create security group

Common security groups [Info](#)

Select security groups

Compare security group rules

my-sg sg-08a22de2ca312e5fa VPC: vpc-00f383162f8f4bcb3

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▼ Summary

Software Image (AMI)

-

Virtual server type (instance type)

t2.micro

Firewall (security group)

my-sg

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Create template version

▼ Instance type [Info](#)

Simple

Manually select instance type

Select an instance type that meets your computing, memory, networking, or storage needs

Specify instance type attributes

Specify instance attributes that match your compute requirements

Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory

On-Demand Linux pricing: 0.0116 USD per Hour

On-Demand Windows pricing: 0.0162 USD per Hour

Free tier eligible

Compare instance types

► Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

▼ Summary

Software Image (AMI)

-

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t2.micro

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my-sg

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Subnet [Info](#)

Don't include in launch template

Primary IP [Info](#)

IPV4 Prefixes [Info](#)

Elastic Fabric Adapter [Info](#)

Enable

EFA is only compatible with certain instance types.

Add network interface

Security groups [Info](#)

Select security groups

my-sg sg-08a22de2ca312e5fa VPC: vpc-00f383162f8f4bcb3

Hide all selected

Secondary IP [Info](#)

Don't include in launch tem...

IPv6 Prefixes [Info](#)

Don't include in launch tem...

Network card index [Info](#)

Don't include in launch tem...

Auto-assign public IP [Info](#)

Enable

IPv6 IPs [Info](#)

Don't include in launch tem...

Delete on termination [Info](#)

Yes

Software Image (AMI)

-

Virtual server type (instance type)

t2.micro

Firewall (security group)

my-sg

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Create template version

Feedback

Looking for language selection? Find it in the new Unified Settings

© 2022, Amazon Internet Services Private Ltd. or its affiliates. [Privacy](#) [Terms](#) [Cookie preference](#)

Storage (volumes) Info

EBS Volumes

Hide details

Volume 1 (Custom)

Remove

Storage type Info

EBS

Device name - required Info

/dev/xvda

Snapshot Info

Don't include in launch tem...

Size (GiB) Info

8

Volume type Info

gp2

IOPS Info

100 / 3000

Delete on termination Info

Don't include in launch tem...

Encrypted Info

Don't include in launch tem...

KMS key Info

Don't include in launch te...

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Add new volume

Summary

Software Image (AMI)

-

Virtual server type (instance type)

t2.micro

Firewall (security group)

my-sg

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Create template version

Key Info

Value Info

Resource types Info

Q AWSApplicator X

Q s-5661f026240 X

Select resource types

Instances X

Volumes X

Key Info

Value Info

Resource types Info

Q Name X

Q ip-42-0-1-185.x X

Select resource types

Instances X

Volumes X

Key Info

Value Info

Resource types Info

Q AWSApplicator X

Q mgn.amazonaw X

Select resource types

Instances X

Volumes X

Key Info

Value Info

Resource types Info

Q Custom X

Q Key X

Select resource types

Instances X

Add tag

Summary

Software Image (AMI)

-

Virtual server type (instance type)

t2.micro

Firewall (security group)

my-sg

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Create template version

STEP 6---CONFIGURING THE TEMPLATE

New EC2 Experience

EC2 Dashboard

EC2 Global View

Events

Tags

Limits

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

The default version of launch template created-and-used-by-application-migration-service-s-5661f02624017ef06-220308-062420 was successfully updated to version 3

EC2 > Launch templates

Launch templates (1/1) Info

Filter by tags or properties or search by keyword

Launch template ID

Launch template name

Default version

Latest version

lt-06f3643586b0c1029

created-and-used-by-application-migration-service-s-5661f02624017ef06-220308-062420

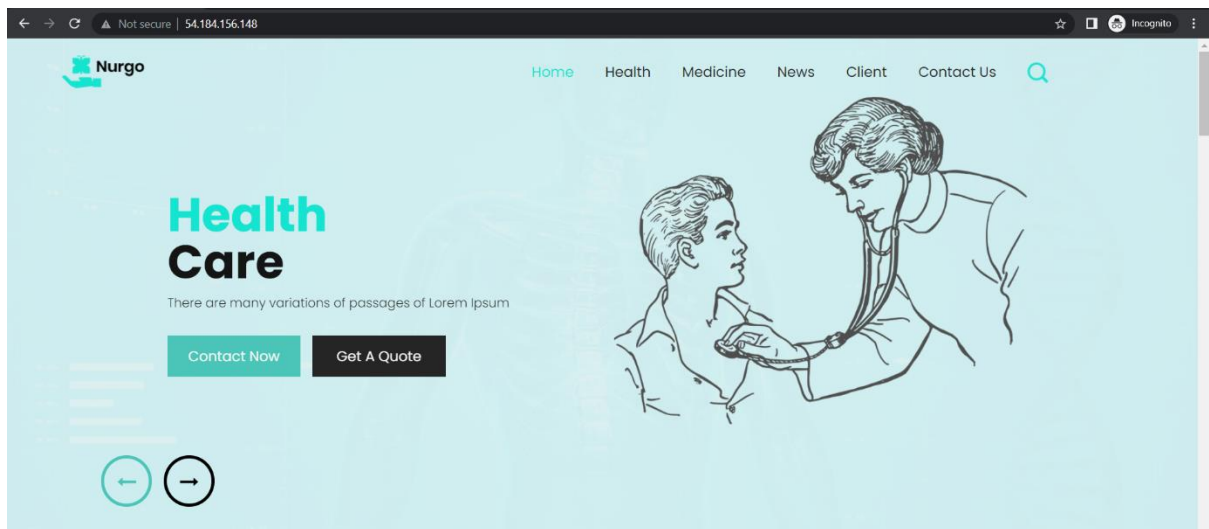
3

3

created-and-used-by-application-migration-service-s-5661f02624017ef06-220308-062420 (lt-06f3643586b0c1029)

Actions

Delete template



STEP 7---SELECT THE SERVER AND DO MARK AS CUT-OVER

Application Migration Service > Source servers

Source servers

Launch history

Settings

AWS Migration Hub [↗](#)

Documentation [↗](#)

Release Notes [↗](#)

Windows Migration Accelerator (WMA) Program
If you are migrating 40 or more servers per month (including at least 14 Windows servers), you may qualify for up to \$250 program. [Learn more](#)

Migration tip #8
Want to learn some best practices for migrating your applications using MGN? [Learn more](#)

☐ Hide future tips

Source servers (1)

Active source servers [Filter source servers by property or value](#)

<input checked="" type="checkbox"/>	Source server name	Alerts	Replication type	Migration lifecycle	Data replication status	Last snapshot	Next step
<input checked="" type="checkbox"/>	ip-42-0-1-185.ec2.internal	-	Agent based	Ready for cutover	Healthy	12 minutes ago	Launch cutover instance

This account is currently replicating 1 server out of a quota of 20 concurrent replicating servers. [Learn more](#)

Testing

- Launch test instances
- Mark as "Ready for cutover"
- Revert to "Ready for testing"

Cutover

- Launch cutover instances
- Finalize cutover
- Revert to "Ready for cutover"

Other

- Edit Launch Settings

STEP 8---FINALIZE CUT-OVER INSTANCE

Application Migration Service > Source servers

Source servers

Launch history

Settings

AWS Migration Hub [↗](#)

Documentation [↗](#)

Release Notes [↗](#)

Introducing: Elastic Disaster Recovery
Protect your applications using AWS Elastic Disaster Recovery (AWS DRS), a new service that enables organizations to minimize fast, reliable recovery of on-premises and cloud-based applications. [Learn more](#)

Migration tip #1
It's important to test launch your servers in AWS up to two weeks before the cutover. Testing is non-disruptive. [Learn more](#)

☐ Hide future tips

Source servers (1)

Active source servers [Filter source servers by property or value](#)

<input checked="" type="checkbox"/>	Source server name	Alerts	Replication type	Migration lifecycle	Data replication status	Last snapshot	Next step
<input checked="" type="checkbox"/>	ip-42-0-1-185.ec2.internal	Launch ed	Agent based	Cutover in progress	Healthy	11 minutes ago	Finalize cutover

Testing

- Launch test instances
- Mark as "Ready for cutover"
- Revert to "Ready for testing"

Cutover

- Launch cutover instances
- Finalize cutover
- Revert to "Ready for cutover"

Other

- Edit Launch Settings

STEP 9---SERVER MARKED AS ARCHIEVED

Application Migration Service

Source servers

Source servers

Launch history

Settings

AWS Migration Hub

Documentation

Release Notes

Introducing: Elastic Disaster Recovery

Protect your applications using AWS Elastic Disaster Recovery (AWS DRS), a new service that enables organizations to minimize downtime and data loss with fast, reliable recovery of on-premises and cloud-based applications. [Learn more](#)

Migration tip #1

It's important to test launch your servers in AWS up to two weeks before the cutover. Testing is non-disruptive. [Learn more](#)

☐ Hide future tips

Source servers (1)

Active source servers

Filter source servers by property or value

Actions

Replication

Test and cutover

Add servers

View server details

Disconnect from service

Mark as archived

Source server name	Alerts	Replication type	Migration lifecycle	Last snapshot	Next step
<input checked="" type="checkbox"/> ip-42-0-1-185.ec2.internal	<input checked="" type="checkbox"/> Launched	Agent based	Cutover complete	Disconnected	Mark as archived

This account is currently replicating 1 server out of a quota of 20 concurrent replicating servers. [Learn more](#)

SUBMITTED BY-AKASH KUMAR DASH