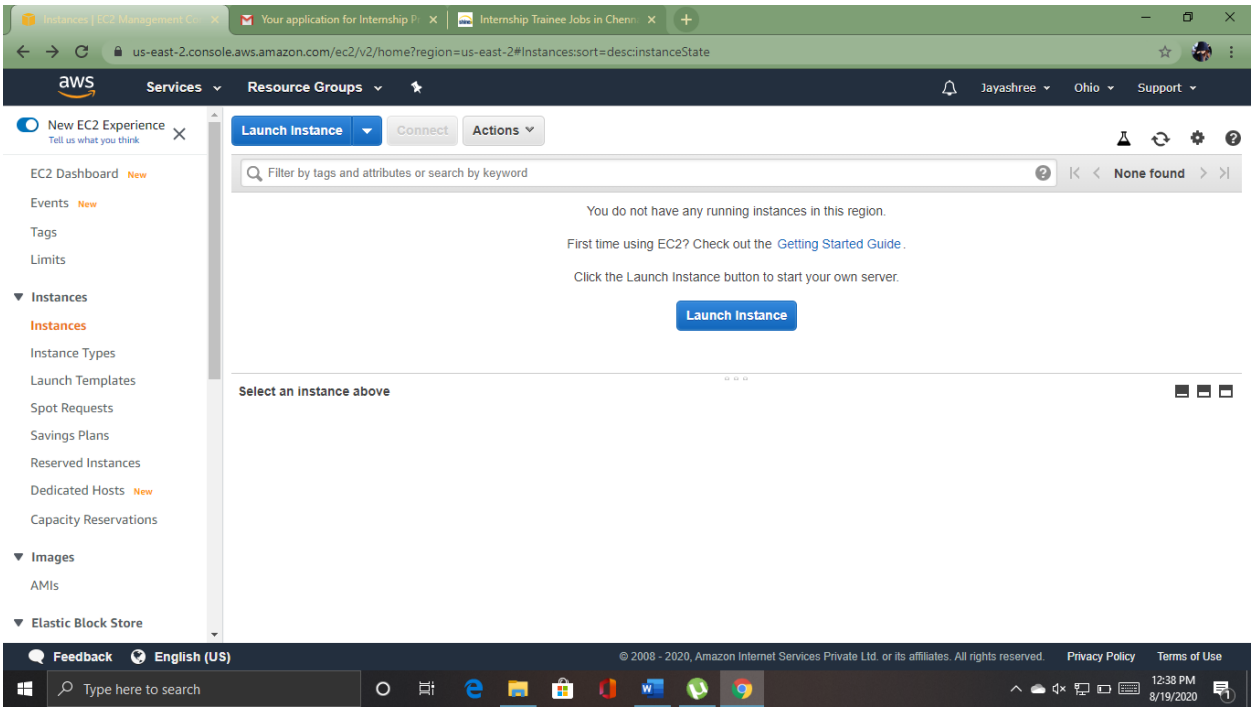
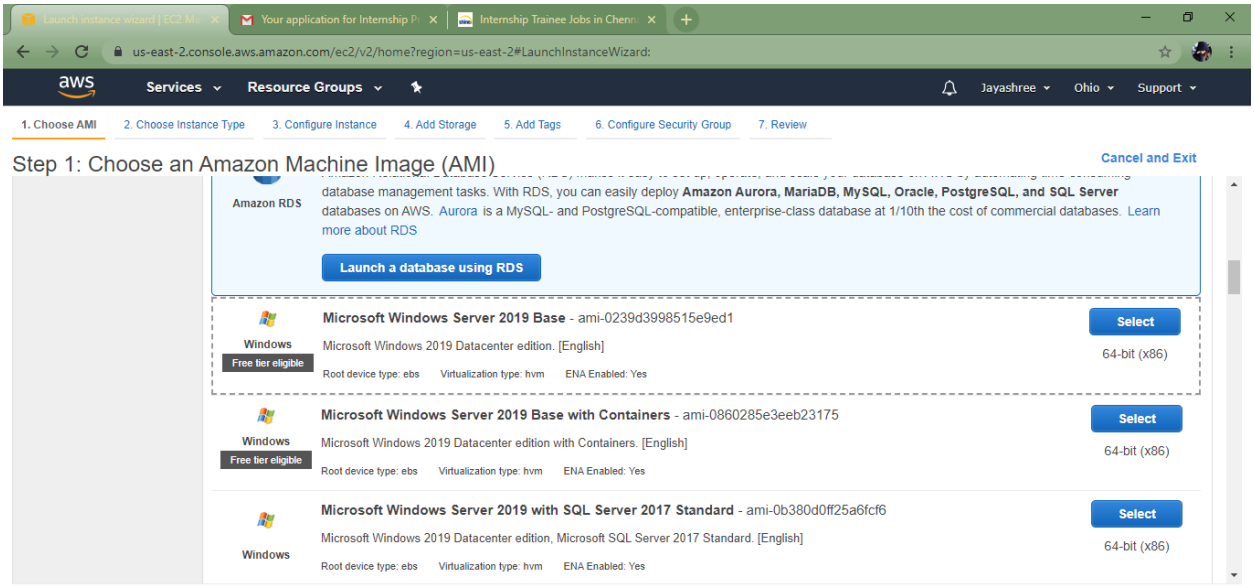
# AWS ESSENTIALS- LAB 1 AND LAB 2

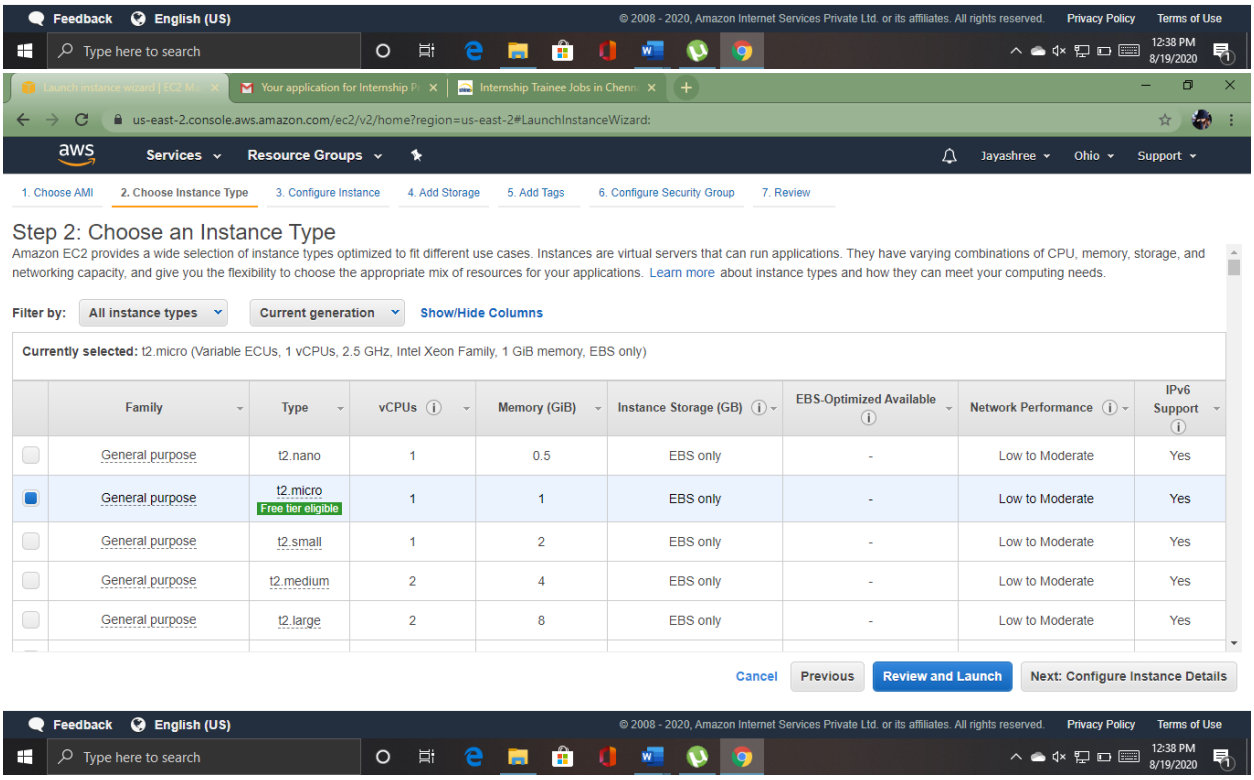
NAME: JAYASHREE N.

## Lab 1 – Deploying webserver using windows

## Step 1: Creating Instance




Launch instance wizard | EC2 Ma
Your application for Internship P
Internship Trainee Jobs in Chenn
us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:
aws
Services
Resource Groups
Jayashree
Ohio
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Add Tags
6. Configure Security Group
7. Review
Step 1: Choose an Amazon Machine Image (AMI)
Cancel and Exit
Amazon RDS
database management tasks. With RDS, you can easily deploy Amazon Aurora, MariaDB, MySQL, Oracle, PostgreSQL, and SQL Server databases on AWS. Aurora is a MySQL- and PostgreSQL-compatible, enterprise-class database at 1/10th the cost of commercial databases. Learn more about RDS
Launch a database using RDS
Windows
Free tier eligible
Microsoft Windows Server 2019 Base - ami-0239d3998515e9ed1
Microsoft Windows 2019 Datacenter edition. [English]
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes
Select
64-bit (x86)
Windows
Free tier eligible
Microsoft Windows Server 2019 Base with Containers - ami-0860285e3eeb23175
Microsoft Windows 2019 Datacenter edition with Containers. [English]
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes
Select
64-bit (x86)
Windows
Microsoft Windows Server 2019 with SQL Server 2017 Standard - ami-0b380d0ff25a6fcf6
Microsoft Windows 2019 Datacenter edition, Microsoft SQL Server 2017 Standard. [English]
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes
Select
64-bit (x86)


Feedback
English (US)
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12:38 PM
8/19/2020
Launch instance wizard | EC2 Ma
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us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:
aws
Services
Resource Groups
Jayashree
Ohio
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Add Tags
6. Configure Security Group
7. Review
Step 2: Choose an Instance Type
Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. Learn more about instance types and how they can meet your computing needs.
Filter by:
All instance types
Current generation
Show/Hide Columns
Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)
Family
Type
vCPUs
Memory (GiB)
Instance Storage (GB)
EBS-Optimized Available
Network Performance
IPv6 Support
General purpose
t2.nano
1
0.5
EBS only
-
Low to Moderate
Yes
General purpose
t2.micro
Free tier eligible
1
1
EBS only
-
Low to Moderate
Yes
General purpose
t2.small
1
2
EBS only
-
Low to Moderate
Yes
General purpose
t2.medium
2
4
EBS only
-
Low to Moderate
Yes
General purpose
t2.large
2
8
EBS only
-
Low to Moderate
Yes
Cancel
Previous
Review and Launch
Next: Configure Instance Details
Feedback
English (US)
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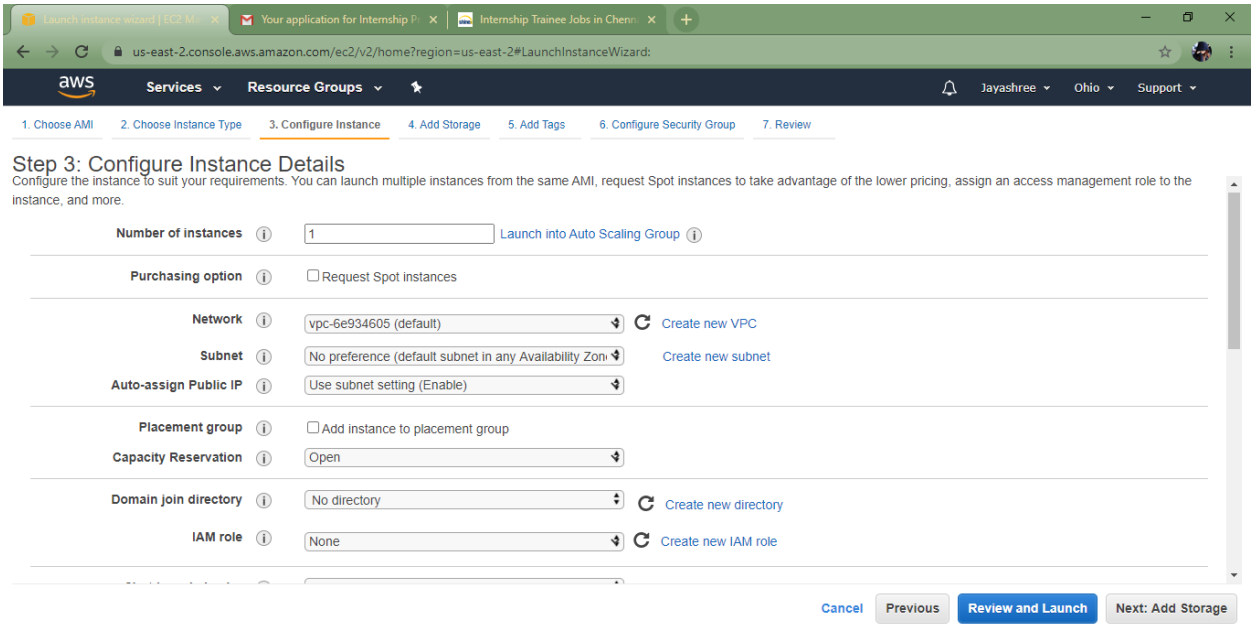
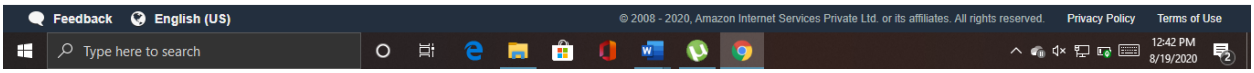

Launch instance wizard | EC2 Ma
Your application for Internship Pr
Internship Trainee Jobs in Chenn
us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:
aws
Services
Resource Groups
Jayashree
Ohio
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Add Tags
6. Configure Security Group
7. Review
Step 3: Configure Instance Details
Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.
Number of instances
1
Launch into Auto Scaling Group
Purchasing option
Request Spot instances
Network
vpc-6e934605 (default)
Create new VPC
Subnet
No preference (default subnet in any Availability Zon
Create new subnet
Auto-assign Public IP
Use subnet setting (Enable)
Placement group
Add instance to placement group
Capacity Reservation
Open
Domain join directory
No directory
Create new directory
IAM role
None
Create new IAM role
Cancel
Previous
Review and Launch
Next: Add Storage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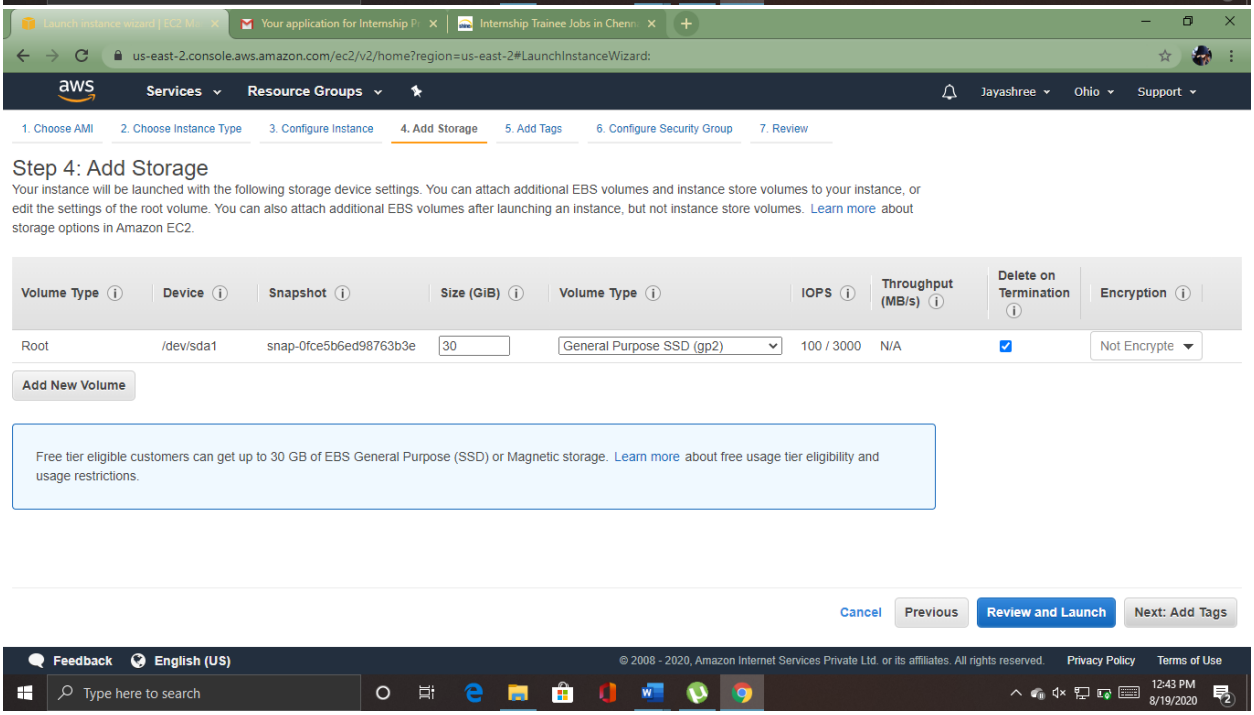
Launch instance wizard | EC2 Ma
Your application for Internship Pr
Internship Trainee Jobs in Chenn
us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:
aws
Services
Resource Groups
Jayashree
Ohio
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Add Tags
6. Configure Security Group
7. Review
Step 4: Add Storage
Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. Learn more about storage options in Amazon EC2.
Volume Type
Device
Snapshot
Size (GiB)
Volume Type
IOPS
Throughput (MB/s)
Delete on Termination
Encryption
Root
/dev/sda1
snap-0fce5b6ed98763b3e
30
General Purpose SSD (gp2)
100 / 3000
N/A
Not Encrypte
Add New Volume
Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. Learn more about free usage tier eligibility and usage restrictions.
Cancel
Previous
Review and Launch
Next: Add Tags


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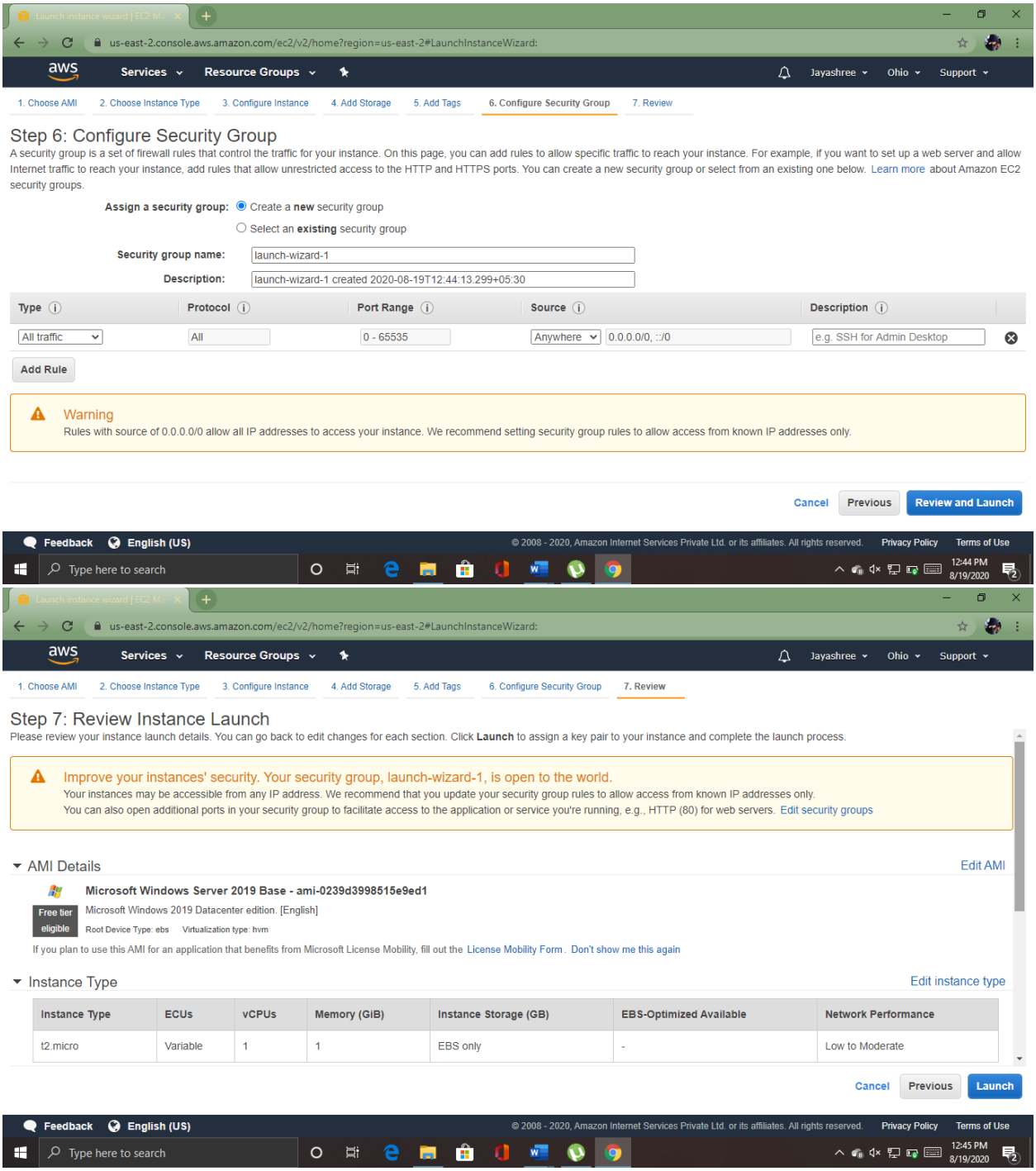
us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:
Services
Resource Groups
Jayashree
Ohio
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Add Tags
6. Configure Security Group
7. Review
Step 6: Configure Security Group
A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. Learn more about Amazon EC2 security groups.
Assign a security group: Create a new security group
Select an existing security group
Security group name: launch-wizard-1
Description: launch-wizard-1 created 2020-08-19T12:44:13.299+05:30
Type
Protocol
Port Range
Source
Description
All traffic
All
0 - 65535
Anywhere
0.0.0.0/0, ::/0
e.g. SSH for Admin Desktop
Add Rule
Warning
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.
Cancel
Previous
Review and Launch
Feedback
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8/19/2020
us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:
Services
Resource Groups
Jayashree
Ohio
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Add Tags
6. Configure Security Group
7. Review
Step 7: Review Instance Launch
Please review your instance launch details. You can go back to edit changes for each section. Click Launch to assign a key pair to your instance and complete the launch process.
Improve your instances' security. Your security group, launch-wizard-1, is open to the world.
Your instances may be accessible from any IP address. We recommend that you update your security group rules to allow access from known IP addresses only.
You can also open additional ports in your security group to facilitate access to the application or service you're running, e.g., HTTP (80) for web servers. Edit security groups
AMI Details
Edit AMI
Microsoft Windows Server 2019 Base - ami-0239d3998515e9ed1
Free tier eligible
Microsoft Windows 2019 Datacenter edition. [English]
Root Device Type: ebs
Virtualization type: hvm
If you plan to use this AMI for an application that benefits from Microsoft License Mobility, fill out the License Mobility Form. Don't show me this again
Instance Type
Edit instance type
Instance Type
ECUs
vCPUs
Memory (GiB)
Instance Storage (GB)
EBS-Optimized Available
Network Performance
t2.micro
Variable
1
1
EBS only
-
Low to Moderate
Cancel
Previous
Launch
Feedback
English (US)
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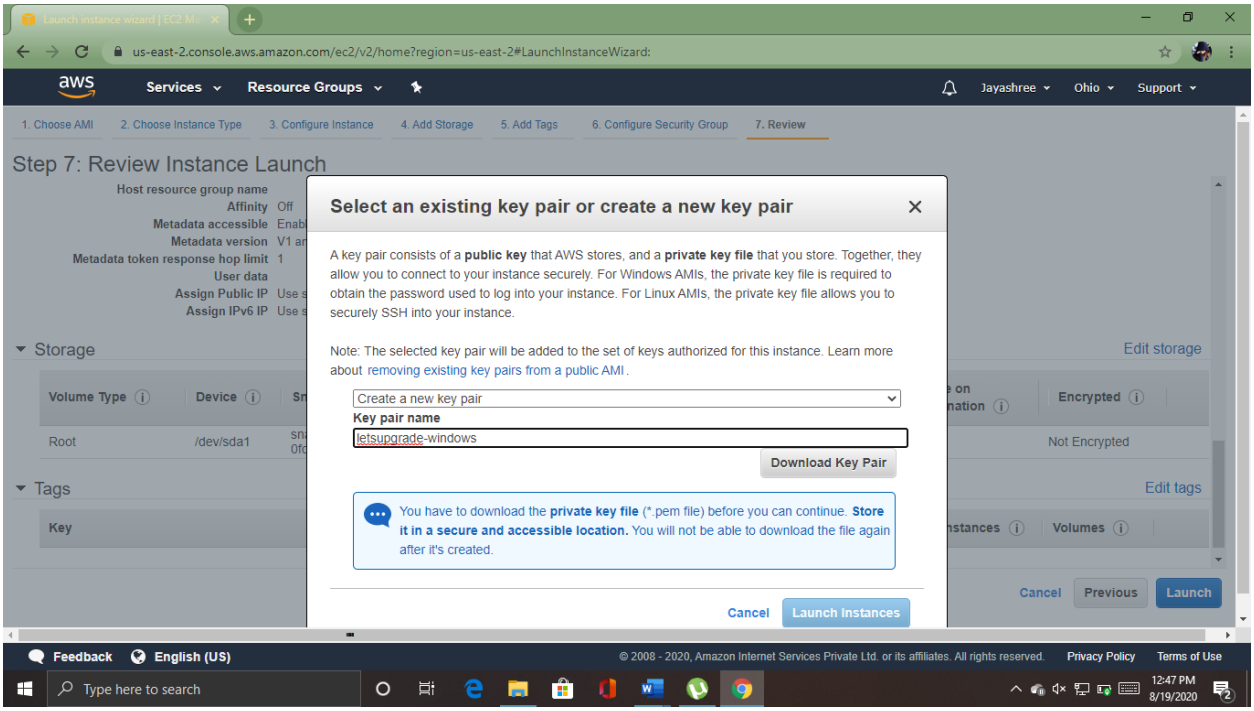
Launch instance wizard | EC2 M
us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:
Services
Resource Groups
Jayashree
Ohio
Support
1. Choose AMI
2. Choose Instance Type
3. Configure Instance
4. Add Storage
5. Add Tags
6. Configure Security Group
7. Review
Step 7: Review Instance Launch
Host resource group name
Affinity Off
Metadata accessible Enab
Metadata version V1 ar
Metadata token response hop limit 1
User data
Assign Public IP Use s
Assign IPv6 IP Use s
Storage
Edit storage
Volume Type
Device
Encrypted
Root
/dev/sda1
Not Encrypted
Tags
Edit tags
Key
Volumes
Cancel
Previous
Launch
Select an existing key pair or create a new key pair
A key pair consists of a public key that AWS stores, and a private key file that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.
Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.
Create a new key pair
Key pair name
letsupgrade-windows
Download Key Pair
You have to download the private key file (*.pem file) before you can continue. Store it in a secure and accessible location. You will not be able to download the file again after it's created.
Cancel
Launch Instances
Feedback
English (US)
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12:47 PM
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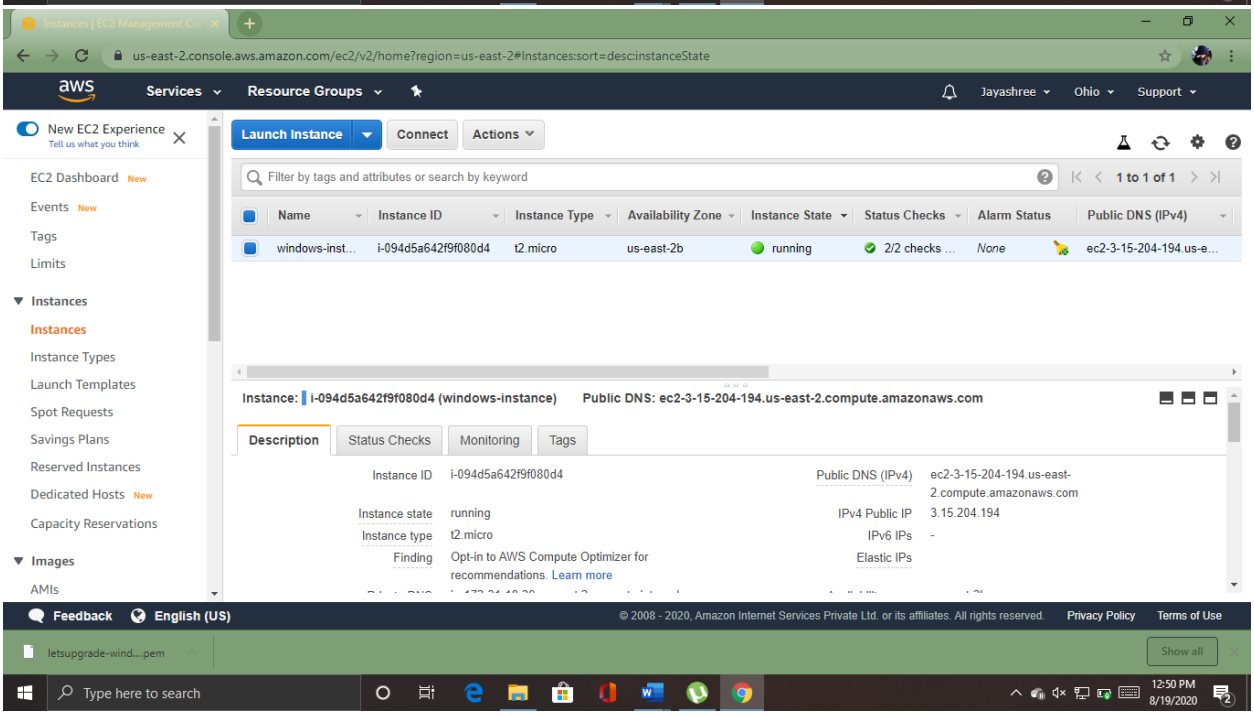
Instances | EC2 Management Co
us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#Instances:sort=desc:instanceState
Services
Resource Groups
Jayashree
Ohio
Support
New EC2 Experience
Tell us what you think
EC2 Dashboard New
Events New
Tags
Limits
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts New
Capacity Reservations
Images
AMIs
Launch Instance
Connect
Actions
Filter by tags and attributes or search by keyword
1 to 1 of 1
Name
Instance ID
Instance Type
Availability Zone
Instance State
Status Checks
Alarm Status
Public DNS (IPv4)
windows-inst...
i-094d5a642f9f080d4
t2.micro
us-east-2b
running
2/2 checks ...
None
ec2-3-15-204-194.us-e...
Instance: i-094d5a642f9f080d4 (windows-instance)
Public DNS: ec2-3-15-204-194.us-east-2.compute.amazonaws.com
Description
Status Checks
Monitoring
Tags
Instance ID
i-094d5a642f9f080d4
Instance state
running
Instance type
t2.micro
Finding
Opt-in to AWS Compute Optimizer for recommendations. Learn more
Public DNS (IPv4)
ec2-3-15-204-194.us-east-2.compute.amazonaws.com
IPv4 Public IP
3.15.204.194
IPv6 IPs
-
Elastic IPs
Feedback
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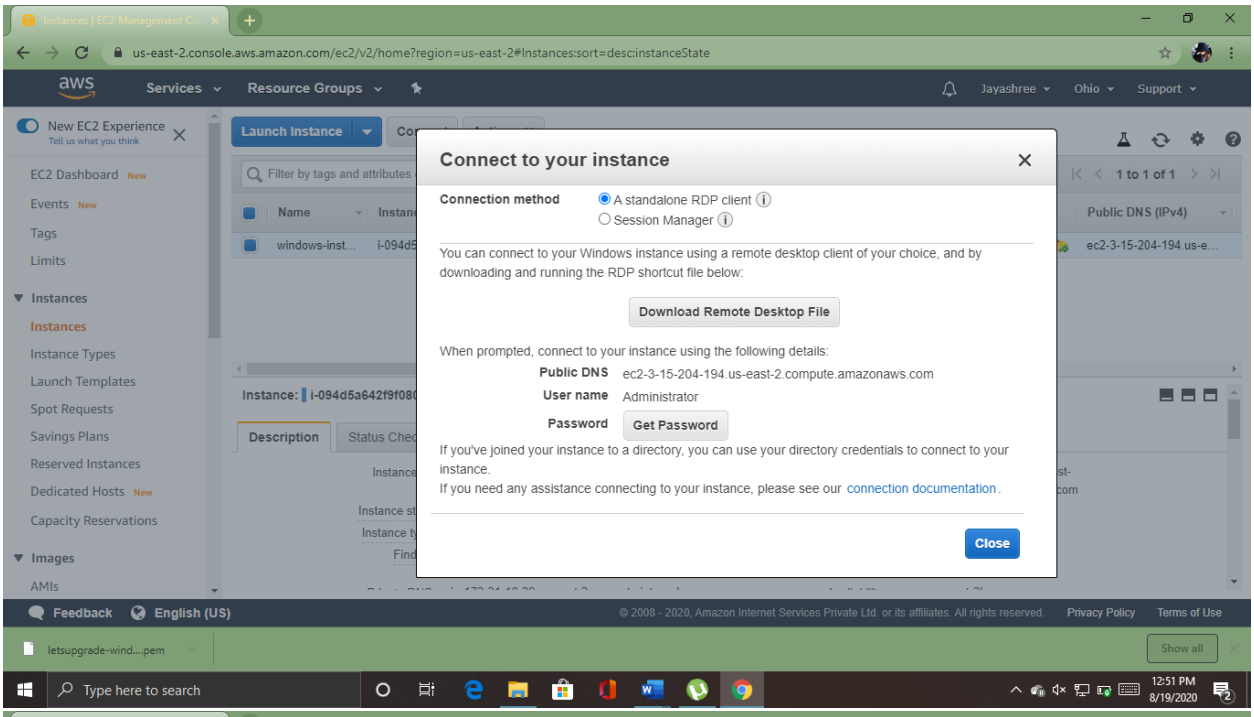
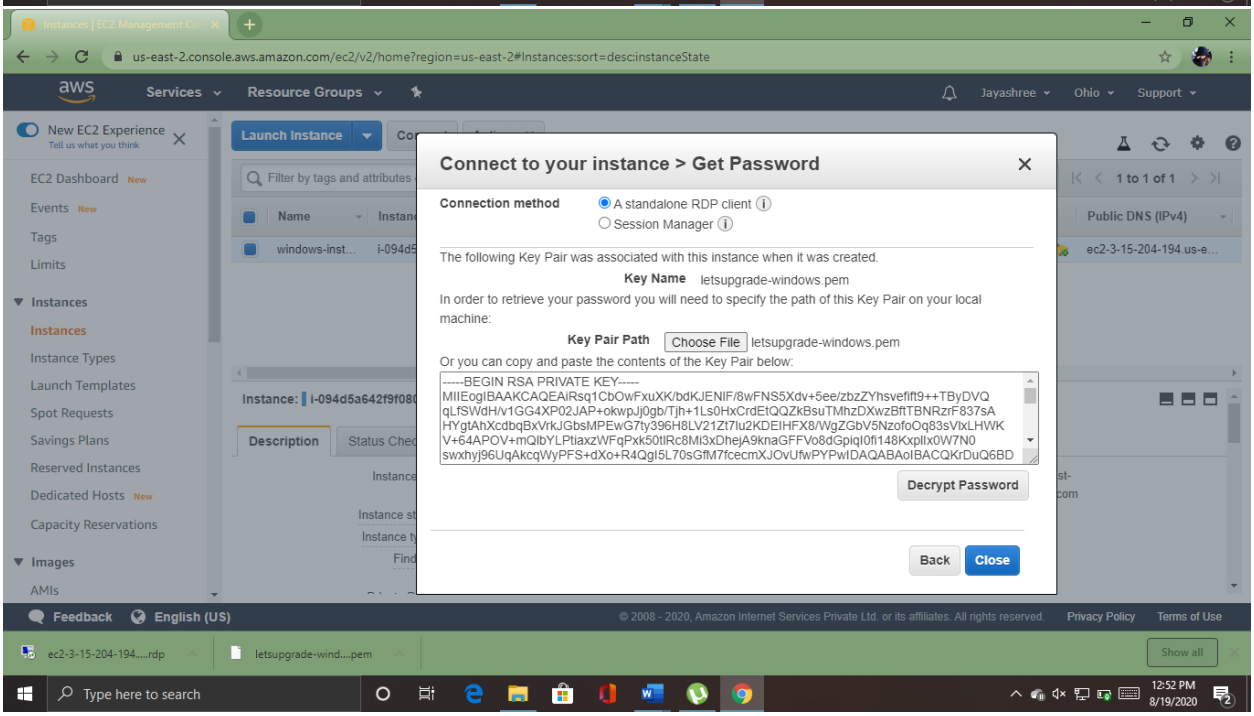
letsupgrade-wind....pem
Show all
Type here to search
12:50 PM
8/19/2020

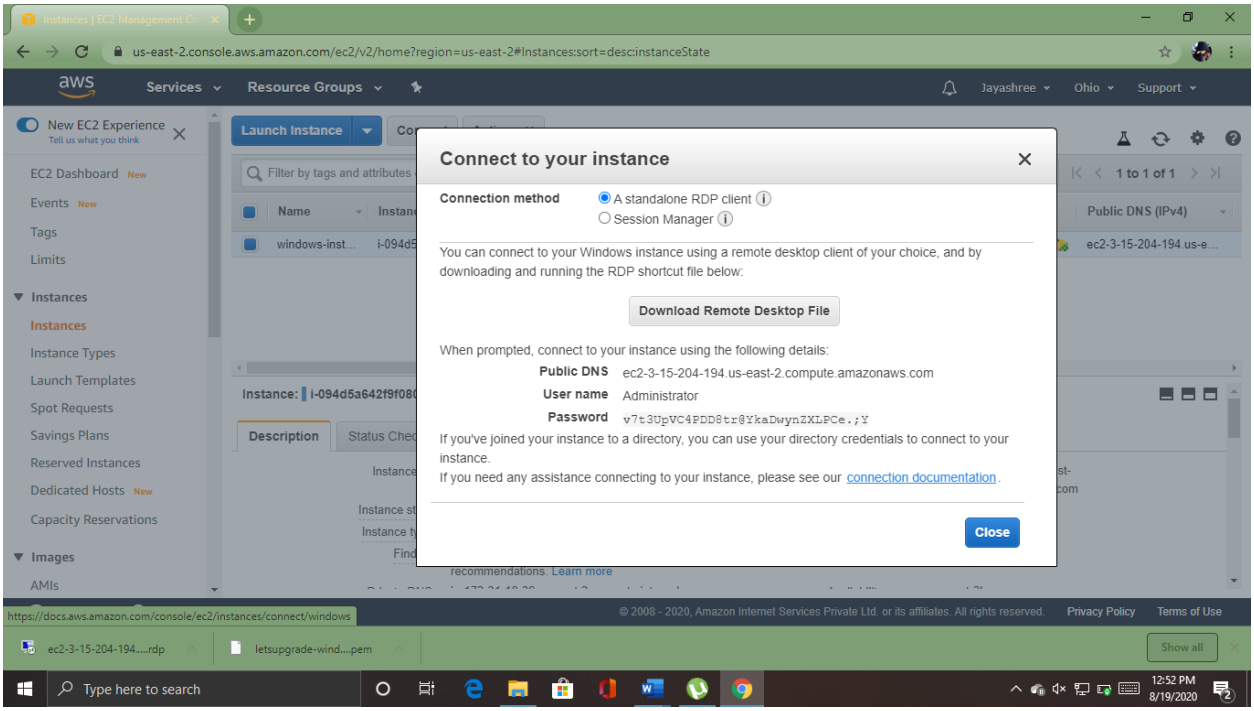
Step 2: Connecting Instance:

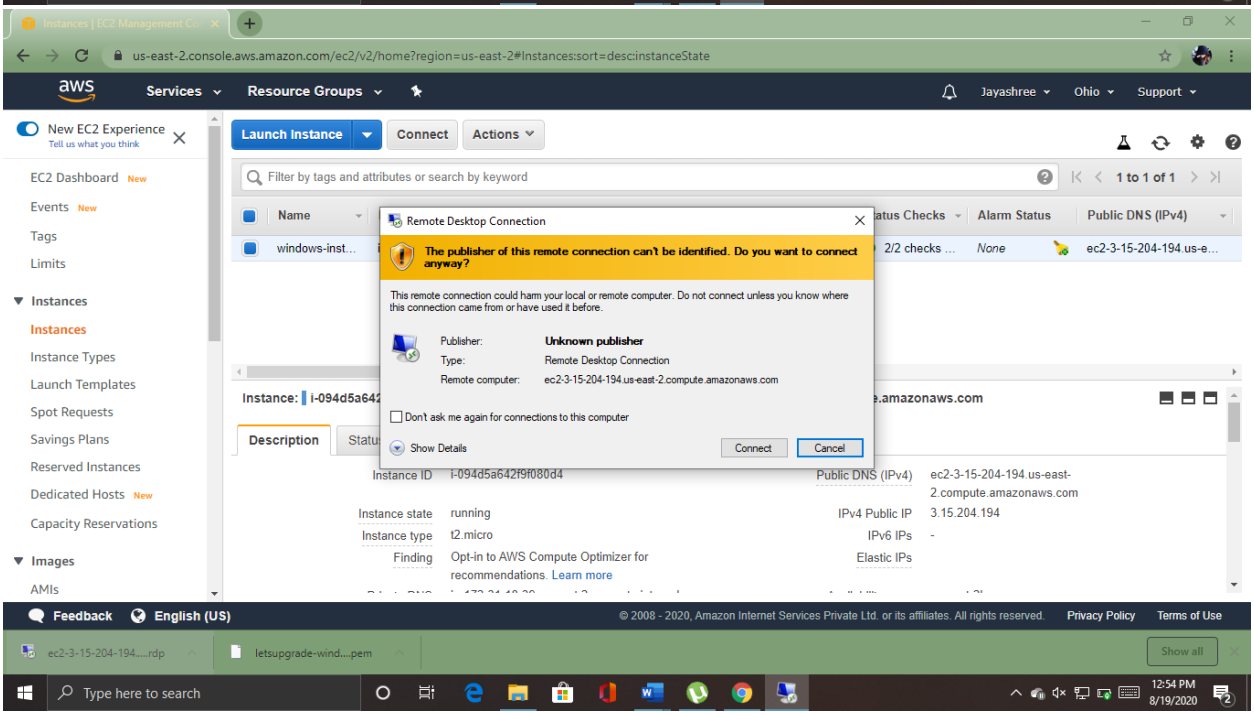
Download the Remote desktop file which used to connect the windows GUI

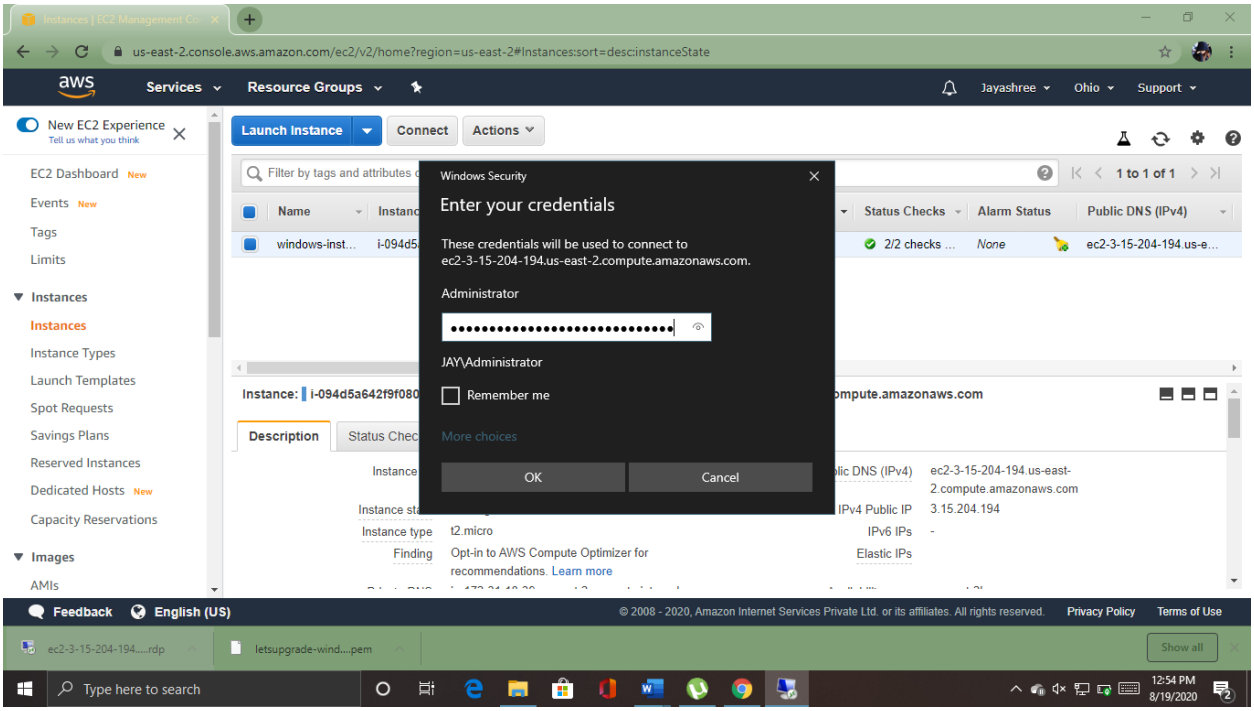
Download password




Connect to your instance
Connection method
A standalone RDP client
Session Manager
You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:
Download Remote Desktop File
When prompted, connect to your instance using the following details:
Public DNS ec2-3-15-204-194.us-east-2.compute.amazonaws.com
User name Administrator
Password v7t3UpVC4PDD8tr@YkaDwynZXLPCe.;Y
If you've joined your instance to a directory, you can use your directory credentials to connect to your instance.
If you need any assistance connecting to your instance, please see our connection documentation.
Close


Remote Desktop Connection
The publisher of this remote connection can't be identified. Do you want to connect anyway?
This remote connection could harm your local or remote computer. Do not connect unless you know where this connection came from or have used it before.
Publisher: Unknown publisher
Type: Remote Desktop Connection
Remote computer: ec2-3-15-204-194.us-east-2.compute.amazonaws.com
Don't ask me again for connections to this computer
Show Details
Connect
Cancel


Launch Instance
Connect
Actions
Windows Security
Enter your credentials
These credentials will be used to connect to ec2-3-15-204-194.us-east-2.compute.amazonaws.com.
Administrator
JAY\Administrator
Remember me
More choices
OK
Cancel
Description
Instance type t2.micro
Finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
IPv4 Public IP 3.15.204.194
IPv6 IPs -
Elastic IPs
Feedback
English (US)
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Type here to search
12:54 PM
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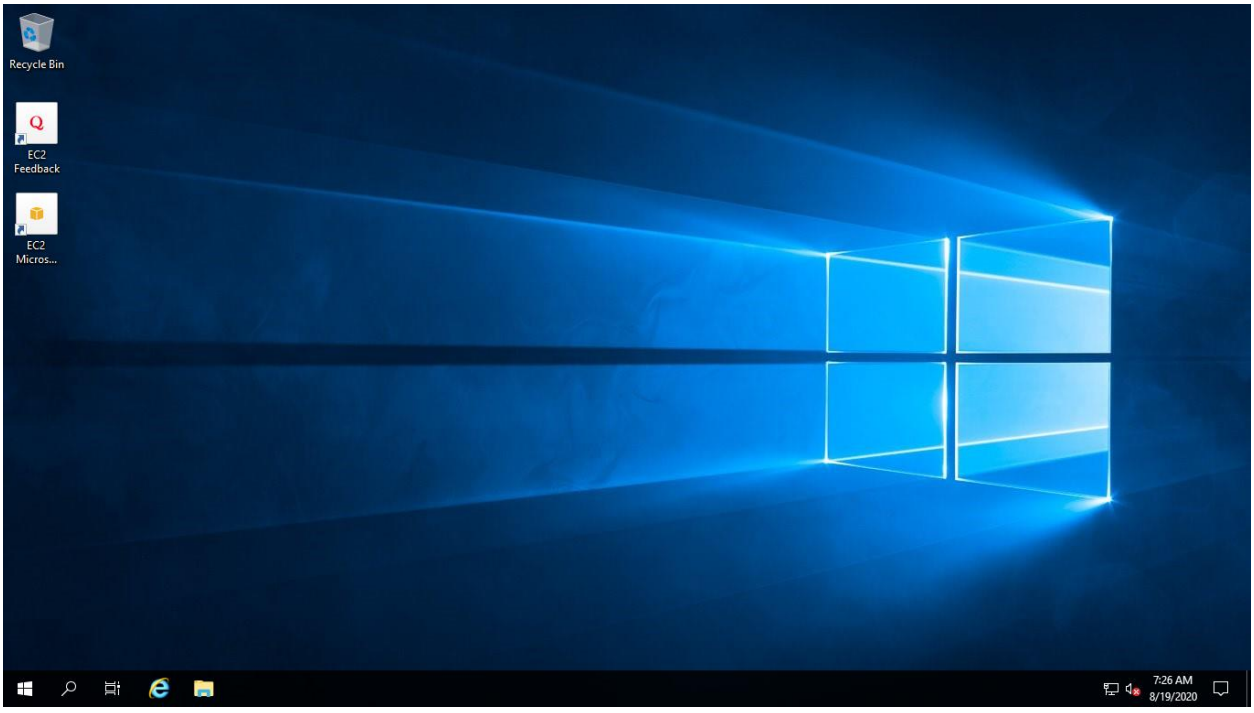
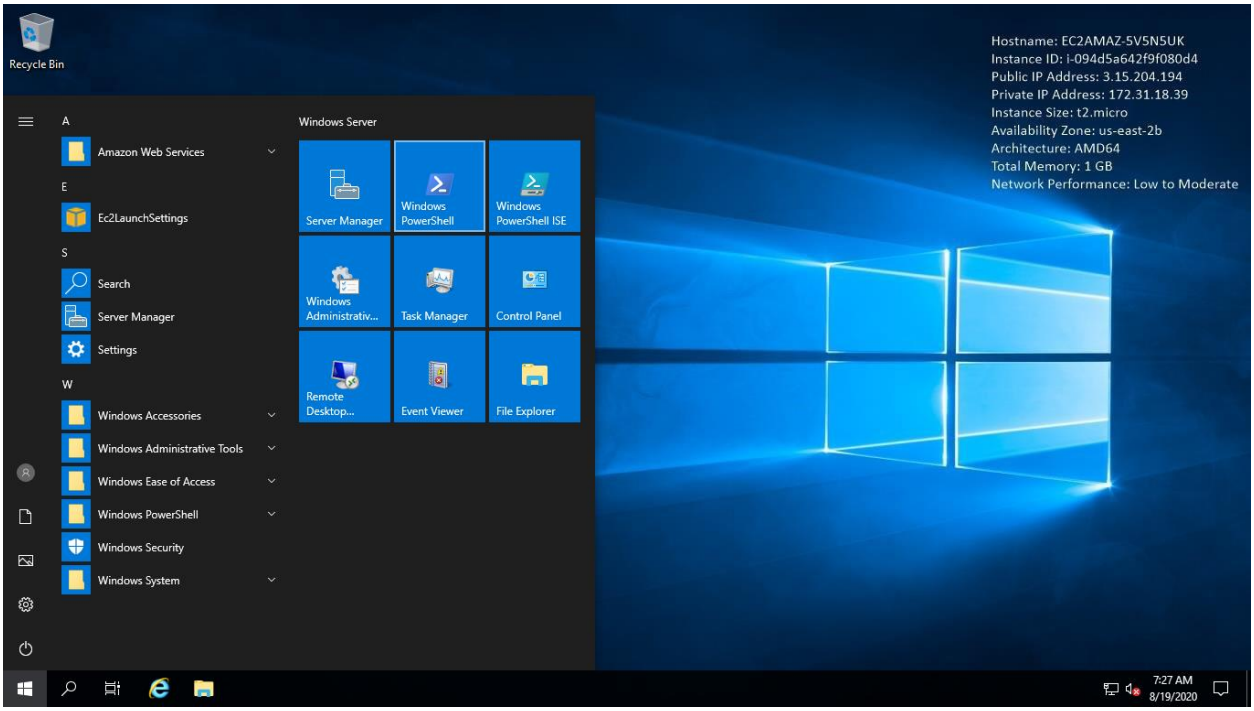
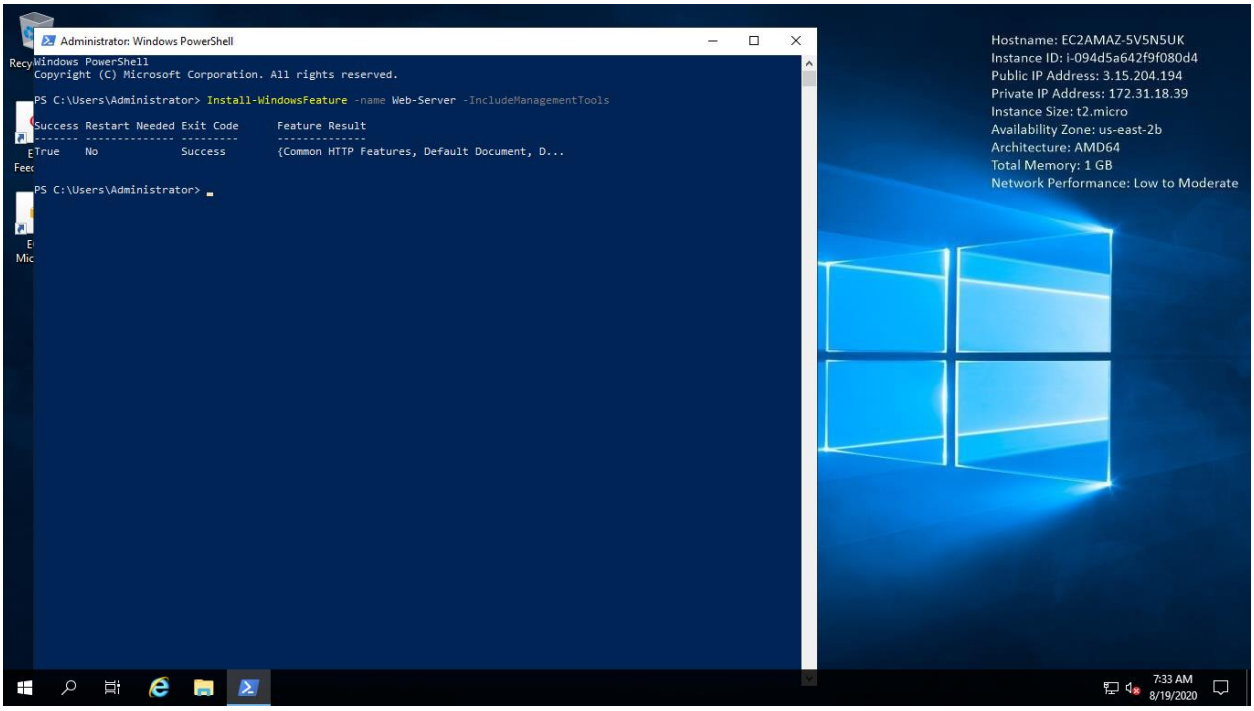
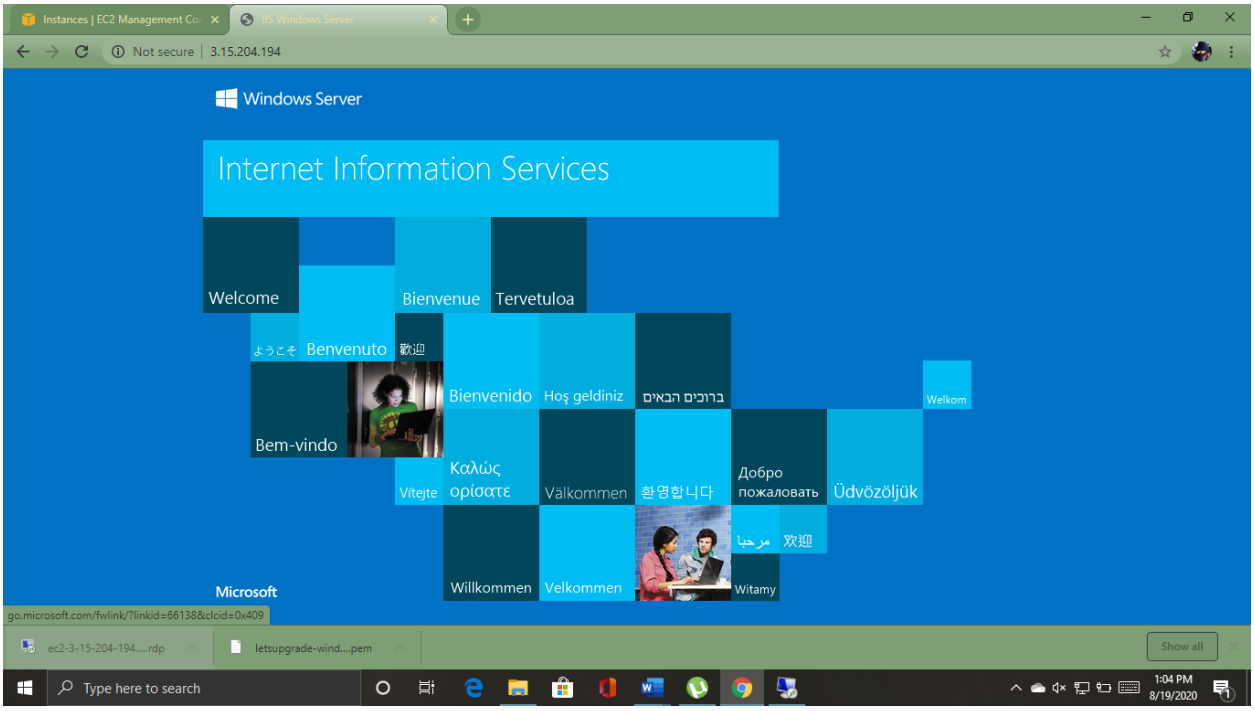

Recycle Bin
EC2 Feedback
EC2 Micros...
7:26 AM
8/19/2020




Installing Windows server in launched machine using command shell(windows power shell)

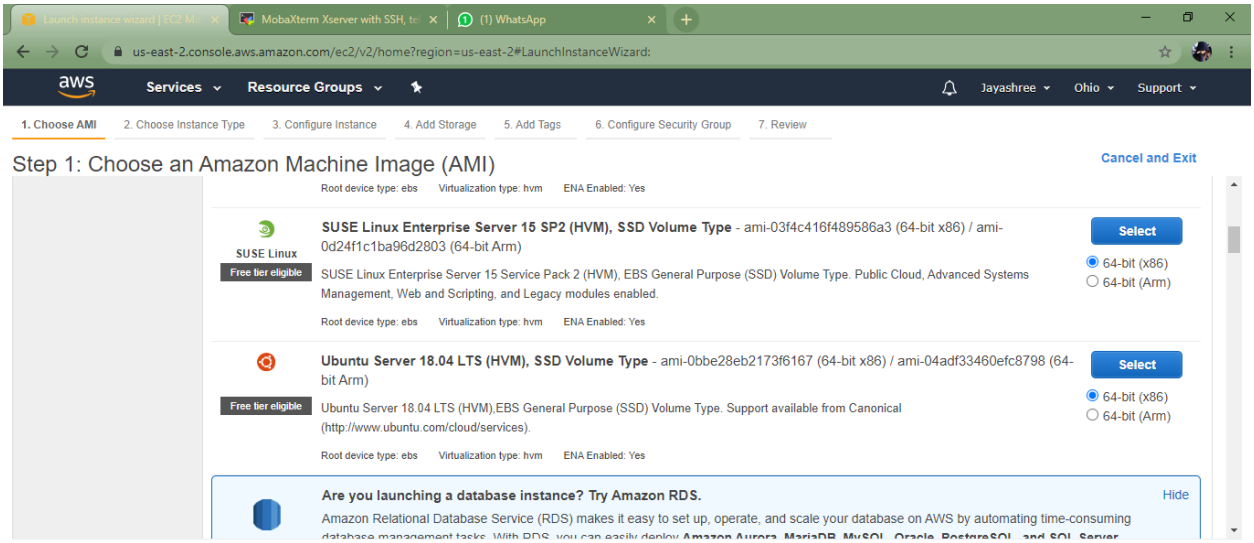


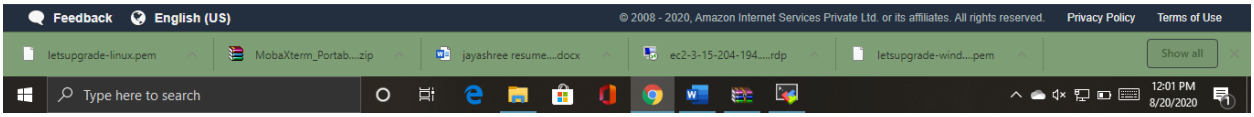
Windows webserver successfully installed!

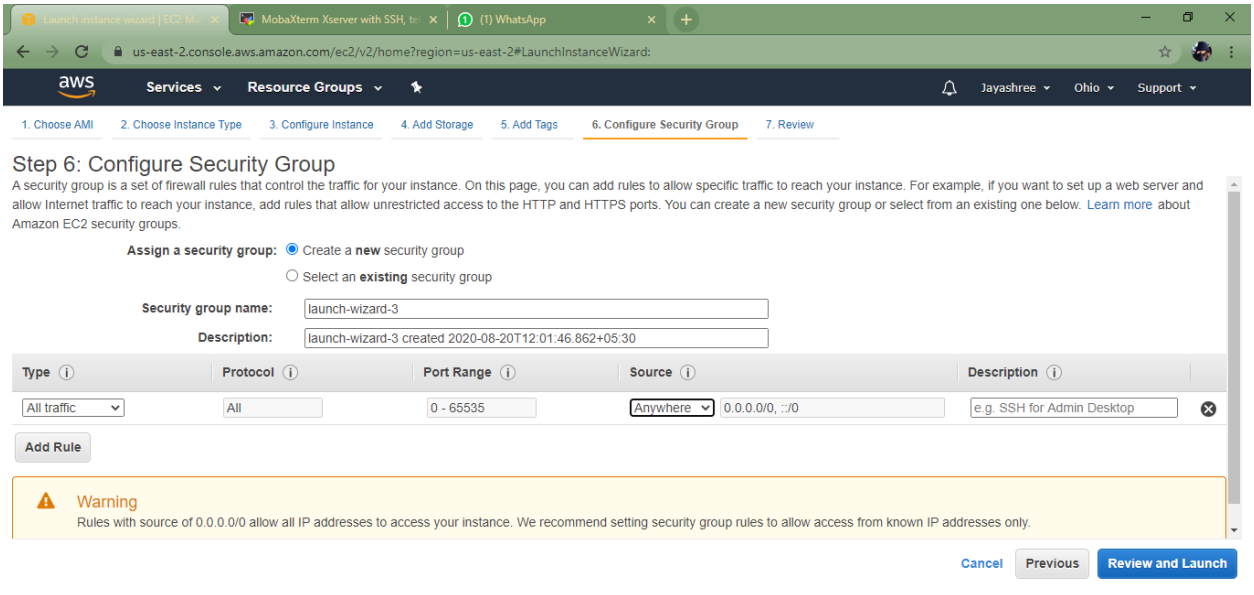


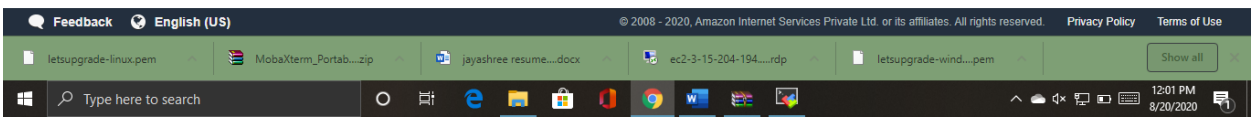
# Lab 2- Deploying webserver in Ubuntu

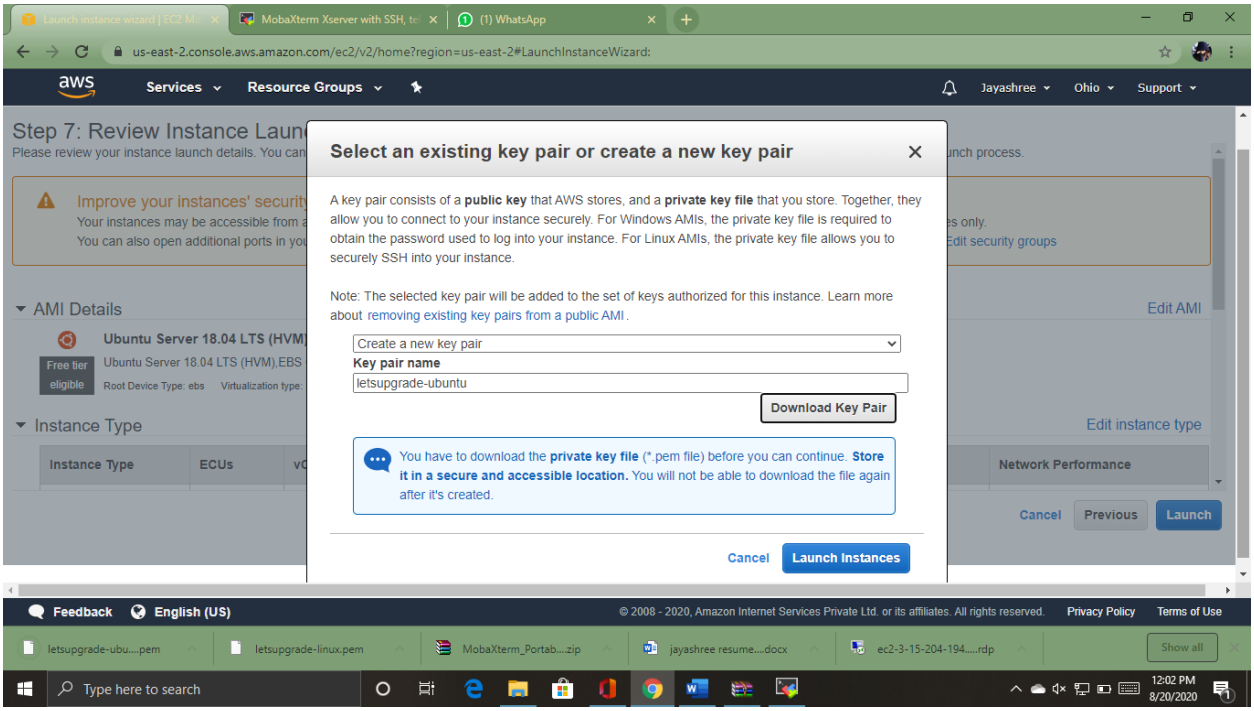
## Step 1 – launhing instance




Select an existing key pair or create a new key pair
A key pair consists of a public key that AWS stores, and a private key file that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.
Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.
Create a new key pair
Key pair name
letsupgrade-ubuntu
Download Key Pair
You have to download the private key file (*.pem file) before you can continue. Store it in a secure and accessible location. You will not be able to download the file again after it's created.
Cancel
Launch Instances
Step 7: Review Instance Laun
Please review your instance launch details. You can
Improve your instances' security
Your instances may be accessible from a
You can also open additional ports in you
AMI Details
Edit AMI
Ubuntu Server 18.04 LTS (HVM)
Free tier eligible
Ubuntu Server 18.04 LTS (HVM),EBS
Root Device Type: ebs
Virtualization type:
Instance Type
Edit instance type
Instance Type
ECUs
Network Performance
Cancel
Previous
Launch
Feedback
English (US)
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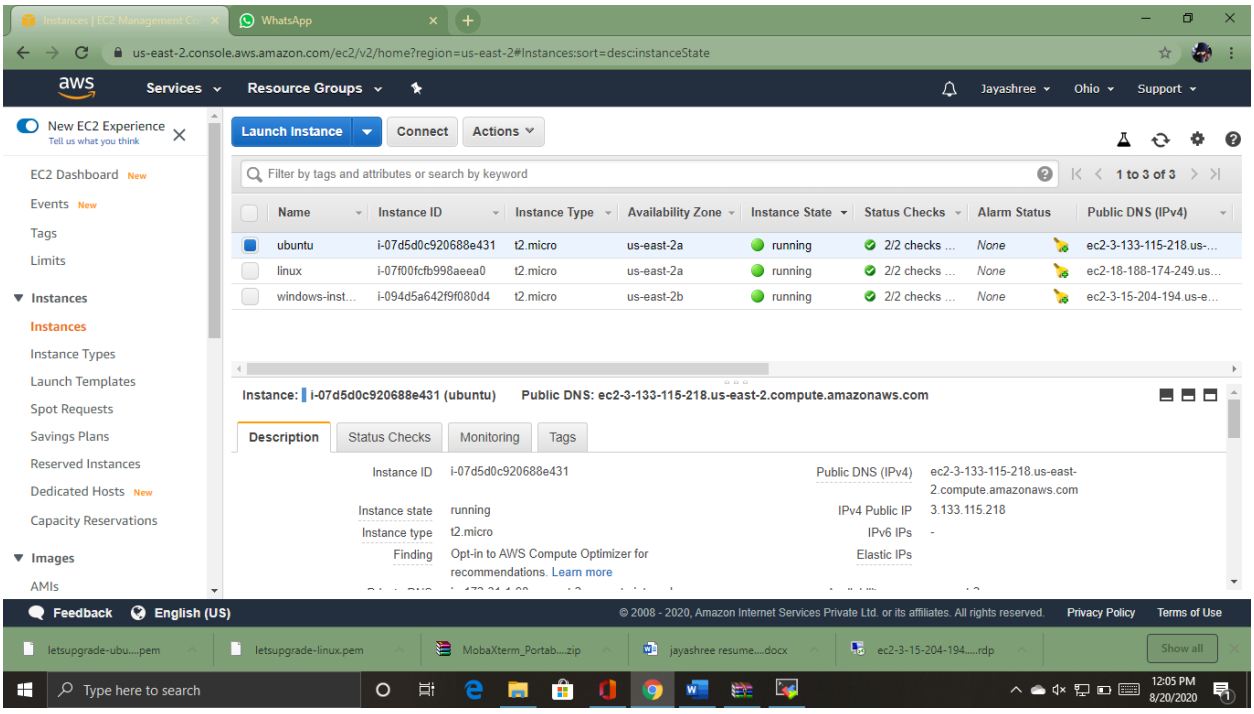
New EC2 Experience
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Events
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Dedicated Hosts
Capacity Reservations
Images
AMIs
Launch Instance
Connect
Actions
Filter by tags and attributes or search by keyword
1 to 3 of 3
Name
Instance ID
Instance Type
Availability Zone
Instance State
Status Checks
Alarm Status
Public DNS (IPv4)
ubuntu
i-07d5d0c920688e431
t2.micro
us-east-2a
running
2/2 checks ...
None
ec2-3-133-115-218.us-...
linux
i-07f00fcfb998aeea0
t2.micro
us-east-2a
running
2/2 checks ...
None
ec2-18-188-174-249.us...
windows-inst...
i-094d5a642f9f080d4
t2.micro
us-east-2b
running
2/2 checks ...
None
ec2-3-15-204-194.us-e...
Instance: i-07d5d0c920688e431 (ubuntu)
Public DNS: ec2-3-133-115-218.us-east-2.compute.amazonaws.com
Description
Status Checks
Monitoring
Tags
Instance ID
i-07d5d0c920688e431
Instance state
running
Instance type
t2.micro
Finding
Opt-in to AWS Compute Optimizer for recommendations. Learn more
Public DNS (IPv4)
ec2-3-133-115-218.us-east-2.compute.amazonaws.com
IPv4 Public IP
3.133.115.218
IPv6 IPs
-
Elastic IPs
Feedback
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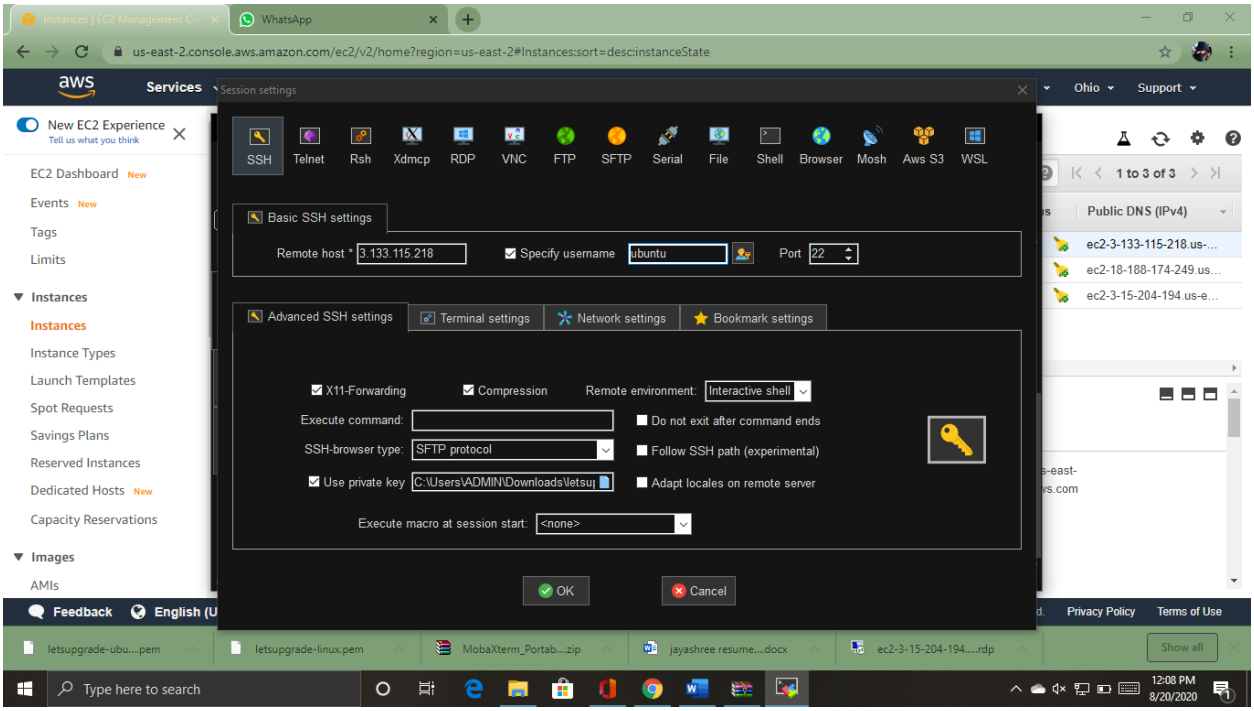
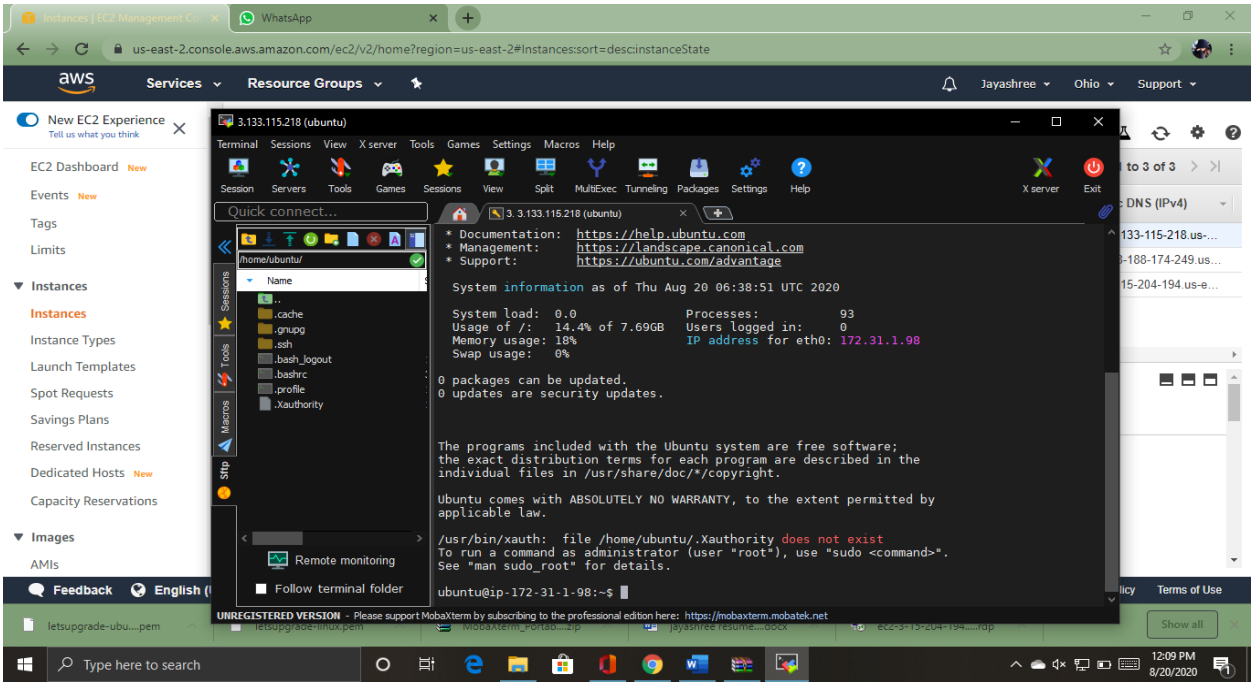
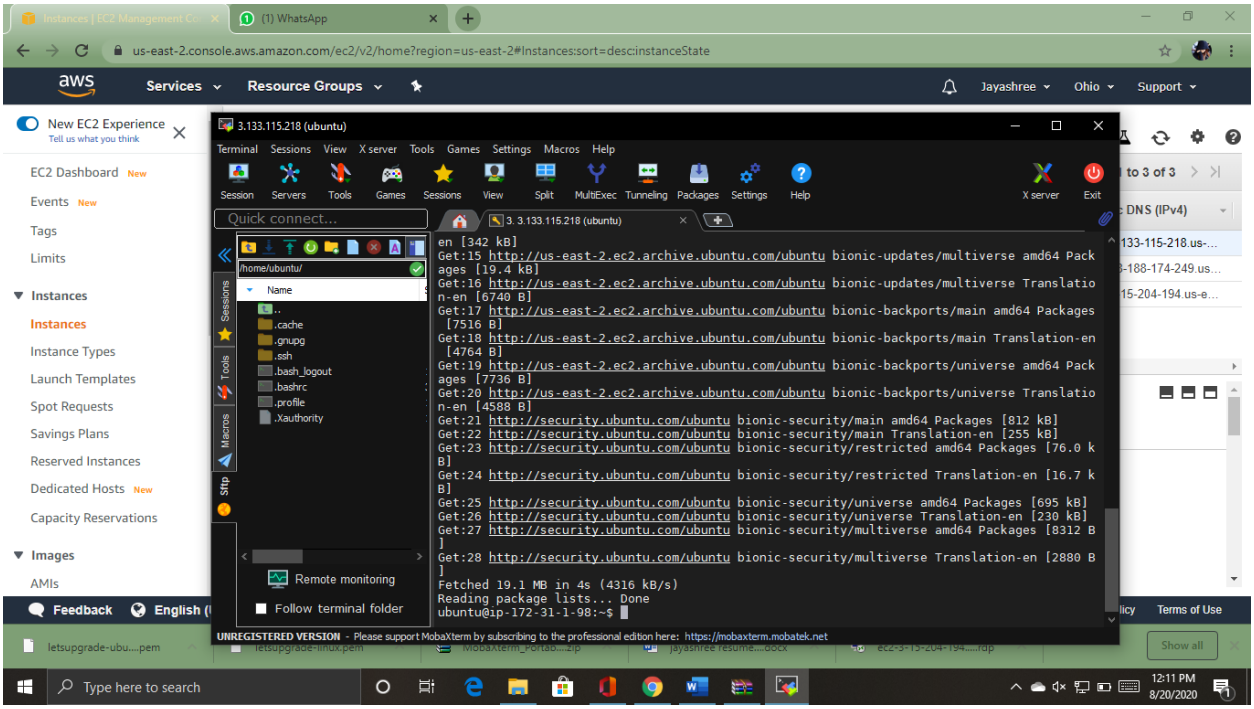
Step 2 – download the MobaXterm to connect the ubuntu server Configure the ubuntu server by giving host number, name and upload the keypair file.




Step 3: update the ubuntu server



# Step 4: install nginx in ubuntu machine




# Ngnix web server successfully installed in Ubuntu machine