



Andhra Pradesh State Skill Development Corporation



AWS CLOUD COMPUTING

LAUNCHING OF AN AMAZON EC2 UBUNTU INSTANCE



Andhra Pradesh State Skill Development Corporation (APSSDC)



Launching of an Amazon EC2 Ubuntu Instance





Launching Amazon EC2 Ubuntu Instance

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Select ☐ Ubuntu Server 18.04 LTS (HVM), SSD Volume Type - ami-0bbe6b35405ecebdb (64-bit x86) / ami-0db180c518750ee4f (64-bit Arm).

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.



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
<input checked="" type="checkbox"/>	General purpose	t2.micro	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes

Buttons: Cancel Previous Review and Launch Next: Configure Instance Details

Select Next: Configure Instance Details

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.

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-29be8753 (default) Create new VPC

Subnet: No preference (default: subnet in any Availability Zone) Create new subnet

Auto-assign Public IP: Use subnet setting (Enable)

Placement group: ☐ Add instance to placement group

Capacity Reservation: Open

IAM role: None Create new IAM role

Buttons: Cancel Previous Review and Launch Next: Add Storage

Select a Based on your requirement select instance type and subnet.



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.

The screenshot shows the AWS Management Console interface for Step 4: Add Storage. The navigation bar at the top includes the AWS logo, Services, Resource Groups, and user information (rupesh kumar, N. Virginia, Support). The breadcrumb trail shows: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, 7. Review. The main heading is "Step 4: Add Storage". Below it, a text block explains that the instance will be launched with the following storage device settings and provides a link to learn more about storage options in Amazon EC2. A table lists the storage settings for the root volume: Volume Type (General Purpose SSD (gp2)), Device (/dev/sda1), Snapshot (snap-091c9b89d2082ce92), Size (8 GiB), IOPS (100 / 3000), Throughput (N/A), Delete on Termination (checked), and Encryption (Not Encrypted). Below the table is an "Add New Volume" button. A blue box contains a note: "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." At the bottom, there are buttons for "Cancel", "Previous", "Review and Launch", and "Next: Add Tags". The footer includes a Feedback link, English (US) language selection, and copyright information (© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy, Terms of Use).

Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Ubuntu_server

The screenshot shows the AWS Management Console interface for Step 5: Add Tags. The navigation bar at the top includes the AWS logo, Services, Resource Groups, and user information (rupesh kumar, N. Virginia, Support). The breadcrumb trail shows: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, 7. Review. The main heading is "Step 5: Add Tags". Below it, a text block explains that a tag consists of a case-sensitive key-value pair and provides an example (key = Name, value = Webserver). It also states that a copy of a tag can be applied to volumes, instances or both, and provides a link to learn more about tagging your Amazon EC2 resources. A table lists the tags: Key (Name), Value (Ubuntu_server), Instances (checked), and Volumes (checked). Below the table is an "Add another tag" button with a note "(Up to 50 tags maximum)". At the bottom, there are buttons for "Cancel", "Previous", "Review and Launch", and "Next: Configure Security Group". The footer includes a Feedback link, English (US) language selection, and copyright information (© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy, Terms of Use).



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.

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:

Description:

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop
HTTP	TCP	80	Anywhere 0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop
HTTPS	TCP	443	Anywhere 0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop

[Add Rule](#)

[Cancel](#) [Previous](#) [Review and Launch](#)

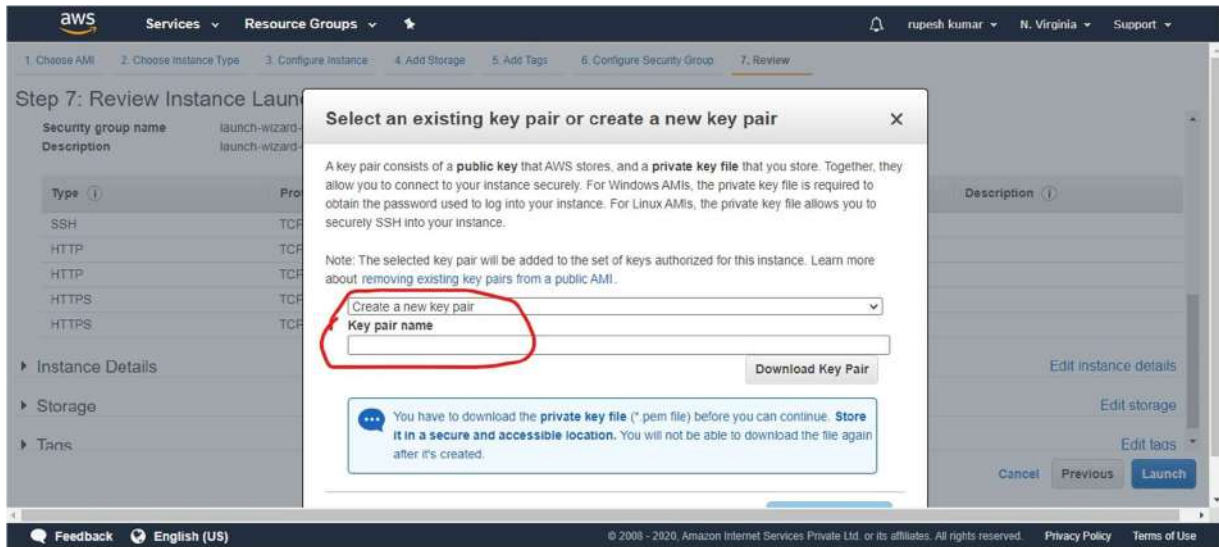
Click on **Review and launch**

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.

Create a Key Pair:

Before launching your instance, AWS uses public-key cryptography to secure the login information for your instance. A Linux instance has no password; you use a key pair to log in to your instance securely. You specify the name of the key pair when you launch your instance, then provide the private key when you login using SSH. If you haven't created a key pair already, you can create one using the Amazon EC2 console. From the navigation bar, select a region for the key pair. You can select any region that's available to you, regardless of your location. However, key pairs are specific to a region; for example, if you plan to launch an instance in the **US East (N. Virginia)** us-east-1, you must create a key pair for the instance in the **US East (N. Virginia)** us-east-1.



To connect to your instance using your key pair to connect to your Ubuntu instance from a computer running Mac or Linux, you'll specify the .pem file to your SSH client with the -i option and the path to your private key.

1.1. To connect to Amazon Ubuntu instance from linux client operating system

Command:

```
$ ssh -i key.pem ubuntu@ec2-35-164-184-80.us-east-1.compute.amazonaws.com
```

Select your instance and make sure your key (pem file) matches your key pair name

```
Terminal
~/ssh$ ssh -i amazon_aws.pem ubuntu@ec2-184-73-23-174.compute-1.amazonaws.com
The authenticity of host 'ec2-184-73-23-174.compute-1.amazonaws.com (184.73.23.174)' can't be established.
ECDSA key fingerprint is e9:ff:d3:1c:3f:a9:64:a0:cc:89:da:f1:08:30:df:10.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'ec2-184-73-23-174.compute-1.amazonaws.com,184.73.23.174' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 12.04.1 LTS (GNU/Linux 3.2.0-31-virtual i686)

 * Documentation:  https://help.ubuntu.com/

System information as of Thu Jan 31 16:09:50 UTC 2013

System load:  0.0          Processes:      66
Usage of /:   18.7% of 7.87GB Users logged in: 0
Memory usage: 6%          IP address for eth0: 10.212.101.187
Swap usage:   0%

Graph this data and manage this system at https://landscape.canonical.com/

21 packages can be updated.
8 updates are security updates.

Get cloud support with Ubuntu Advantage Cloud Guest
http://www.ubuntu.com/business/services/cloud
ubuntu@ip-10-212-101-187:~$
```



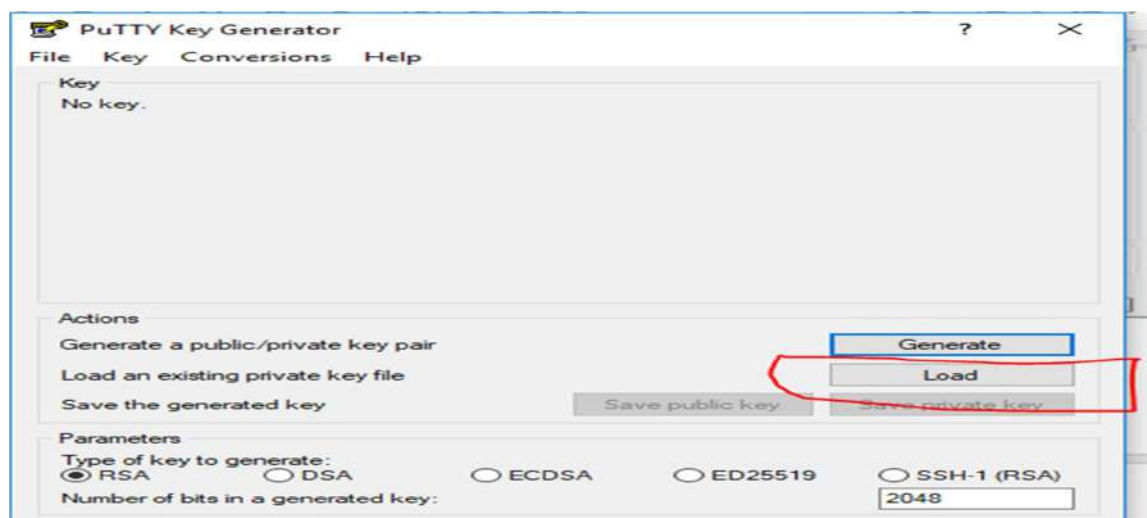
1.2. To connect to Amazon Ubuntu instance from Windows client operating system

To connect to your Ubuntu instance from a computer running Windows, you can use either MindTerm or PuTTY. If you plan to use PuTTY, you'll need to install it and use the following procedure to convert the .pem file to a .ppk file (for generation of PPK file Install Puttygen)

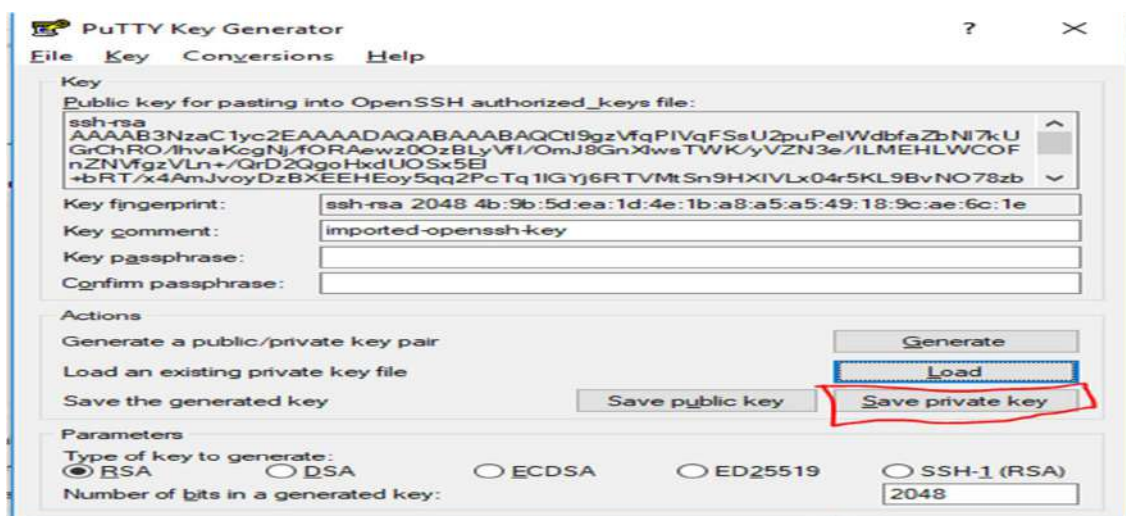
Download PuTTY: <https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>.

To prepare to connect to an Ubuntu instance from Windows using PuTTY, **CONVERT YOUR PEM FILE TO PPK FORMAT**

1. Open puttygen and load the pem file into the puttygen



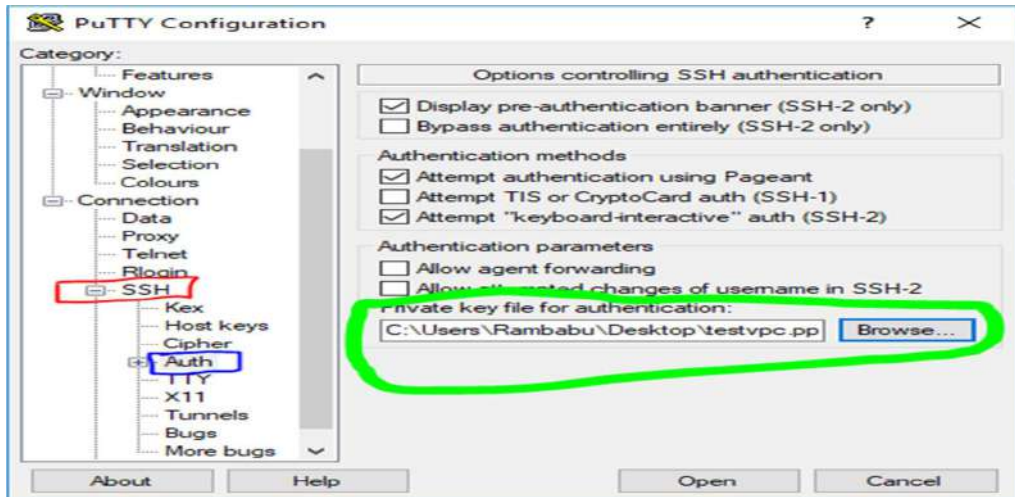
2. Save the private key by assigning a name to that file





□ Open Putty

- i. Enter Host Name
- ii. Select your PPK file.
- iii. Open your terminal Session



Installing an Ubuntu Web Server on Amazon

To install and start the Ubuntu web server.

1. Connect to your instance in putty

User name: ubuntu

```
ubuntu@ip-172-31-16-136 ~$
login as: ubuntu
Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 18.04.1 LTS (GNU/Linux 4.15.0-1021-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Dec  6 04:40:56 UTC 2018

System load: 0.0          Processes:            87
Usage of /:  14.6% of 7.69GB Users logged in:      0
Memory usage: 14%        IP address for eth0: 172.31.16.136
Swap usage:  0%

 * MicroK8s is Kubernetes in a snap. Made by devs for devs.
   One quick install on a workstation, VM, or appliance.

   - http://bit.ly/microk8s

Get cloud support with Ubuntu Advantage Cloud Guest:
  http://www.ubuntu.com/business/services/cloud

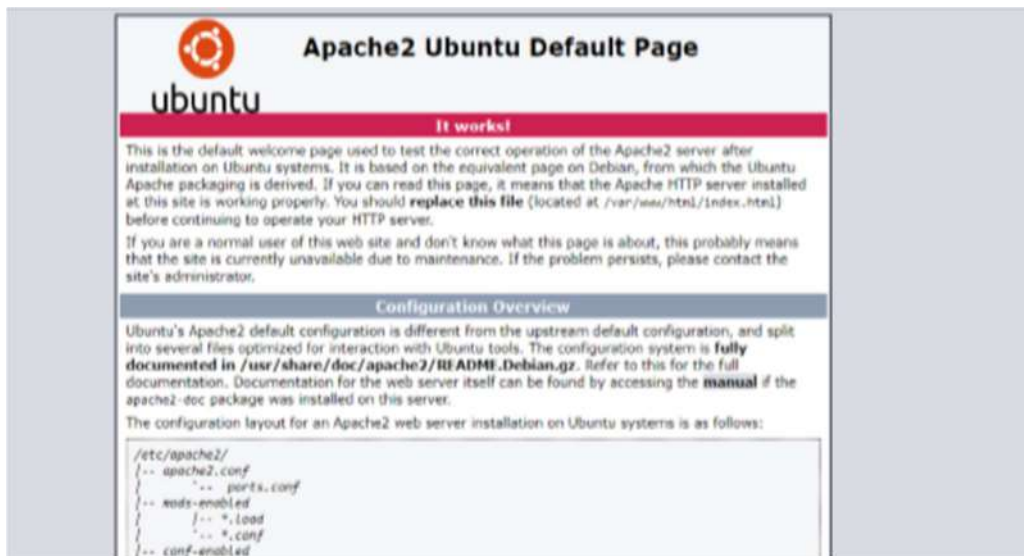
0 packages can be updated.
0 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
```



2. To ensure that all of your software packages are up to date, perform a quick software update on your instance. **\$ sudo apt-get update**
3. Now that your instance is current, you can install the Apache web server, MySQL, and PHP software packages. **\$ sudo apt-get install apache2**
4. Restart the Apache web server. **\$ service apache2 restart**
5. Also start all the web servers by executing its commands
6. If your server is installed and running, and your file permissions are set correctly, your ec2-user account should be able to create a PHP file in the /var/www/html directory that is available from the internet
7. In the web browser, type the URL of the file that you just created. This URL is the public DNS or ip address of your instance followed by a forward slash and the file name.

e.g: 54.187.117.10





Andhra Pradesh State Skill Development Corporation (APSSDC)



Launching of an Amazon EC2 Ubuntu Instance





Launching Amazon EC2 Ubuntu Instance

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

aws Services Resource Groups

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

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Search for an AMI by entering a search term e.g. "Windows"

Search by Systems Manager parameter

Quick Start 1 to 40 of 40 AMIs

My AMIs

AWS Marketplace

Community AMIs

☐ Free tier only

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-02354e95b39ca8dec (64-bit x86) / ami-0c5bf07e510b75b11 (64-bit Arm) Select

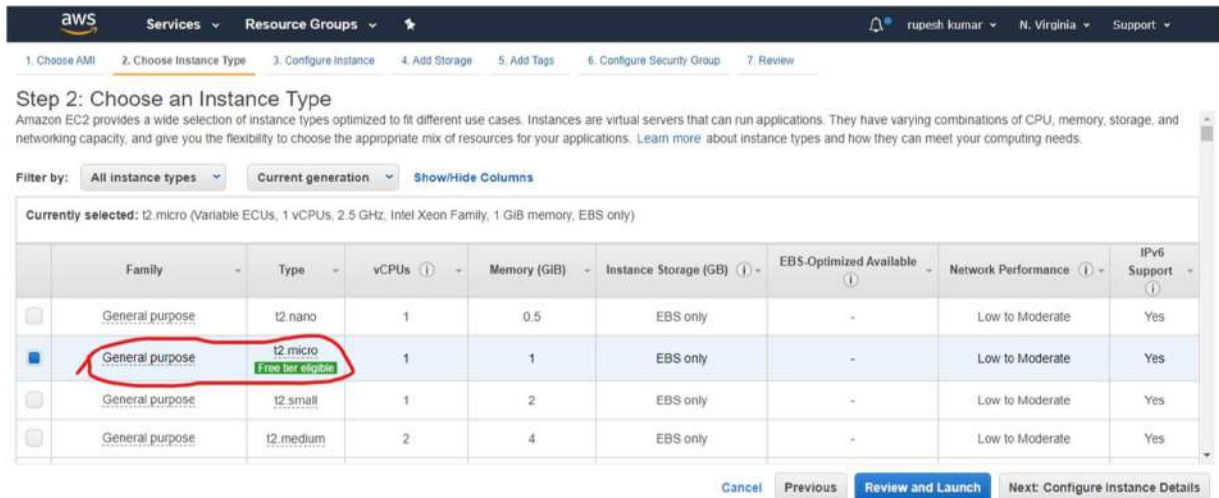
Amazon Linux 2018.03.0 (HVM), SSD Volume Type - ami-0761dd91277e34178 Select

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Select **Ubuntu Server 18.04 LTS (HVM), SSD Volume Type - ami-0bbe6b35405ecebdb (64-bit x86) / ami-0db180c518750ee4f (64-bit Arm).**

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.



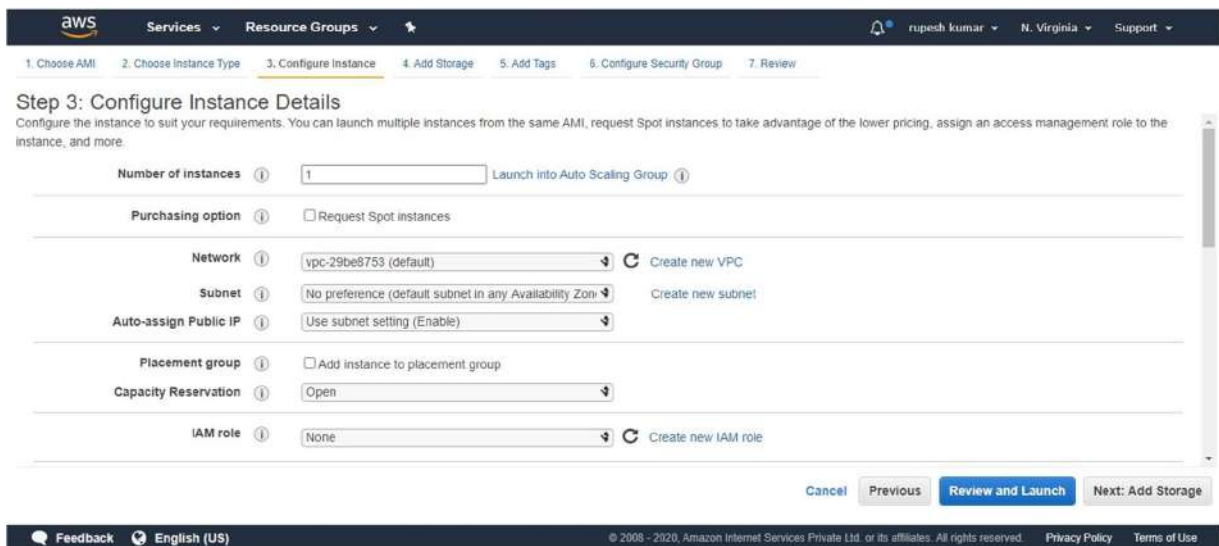
The screenshot shows the AWS console interface for Step 2: Choose an Instance Type. The navigation bar at the top includes 'aws', 'Services', 'Resource Groups', and user information. A progress bar shows steps from '1. Choose AMI' to '7. Review'. The main heading is 'Step 2: Choose an Instance Type', followed by a descriptive paragraph about Amazon EC2 instances. Below this, there are filters: 'All instance types', 'Current generation', and 'Show/Hide Columns'. A summary line states: 'Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)'. A table lists instance types with columns for Family, Type, vCPUs, Memory (GiB), Instance Storage (GB), EBS-Optimized Available, Network Performance, and IPv6 Support. The 't2.micro' instance is highlighted with a red circle and a green 'Free tier eligible' tag. At the bottom, there are buttons for 'Cancel', 'Previous', 'Review and Launch', and 'Next: Configure Instance Details'.

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	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

Select Next: Configure Instance Details

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.



The screenshot shows the AWS console interface for Step 3: Configure Instance Details. The navigation bar and progress bar are consistent with the previous step. The heading is 'Step 3: Configure Instance Details', followed by a descriptive paragraph. The configuration options are as follows: 'Number of instances' is set to 1 with a 'Launch into Auto Scaling Group' link; 'Purchasing option' has a checkbox for 'Request Spot instances' which is unchecked; 'Network' is set to 'vpc-29be8753 (default)' with a 'Create new VPC' link; 'Subnet' is set to 'No preference (default: subnet in any Availability Zone)' with a 'Create new subnet' link; 'Auto-assign Public IP' is set to 'Use subnet setting (Enable)'; 'Placement group' has a checkbox for 'Add instance to placement group' which is unchecked; 'Capacity Reservation' is set to 'Open'; and 'IAM role' is set to 'None' with a 'Create new IAM role' link. At the bottom, there are buttons for 'Cancel', 'Previous', 'Review and Launch', and 'Next: Add Storage'.

Select a Based on your requirement select instance type and subnet.



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.

The screenshot shows the AWS Management Console interface for Step 4: Add Storage. The navigation bar at the top includes the AWS logo, 'Services', 'Resource Groups', and user information (rupesh kumar, N. Virginia, Support). The breadcrumb trail shows: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage (active), 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-091c9b89d2082ce92	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

[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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Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Ubuntu_server

The screenshot shows the AWS Management Console interface for Step 5: Add Tags. The navigation bar at the top includes the AWS logo, 'Services', 'Resource Groups', and user information (rupesh kumar, N. Virginia, Support). The breadcrumb trail shows: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags (active), 6. Configure Security Group, 7. Review.

Step 5: Add Tags
A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. A copy of a tag can be applied to volumes, instances or both. Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key (128 characters maximum)	Value (256 characters maximum)	Instances	Volumes
Name	Ubuntu_server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

[Add another tag](#) (Up to 50 tags maximum)

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Configure Security Group](#)

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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.

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:

Description:

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop
HTTP	TCP	80	Anywhere 0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop
HTTPS	TCP	443	Anywhere 0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop

[Add Rule](#)

[Cancel](#) [Previous](#) [Review and Launch](#)

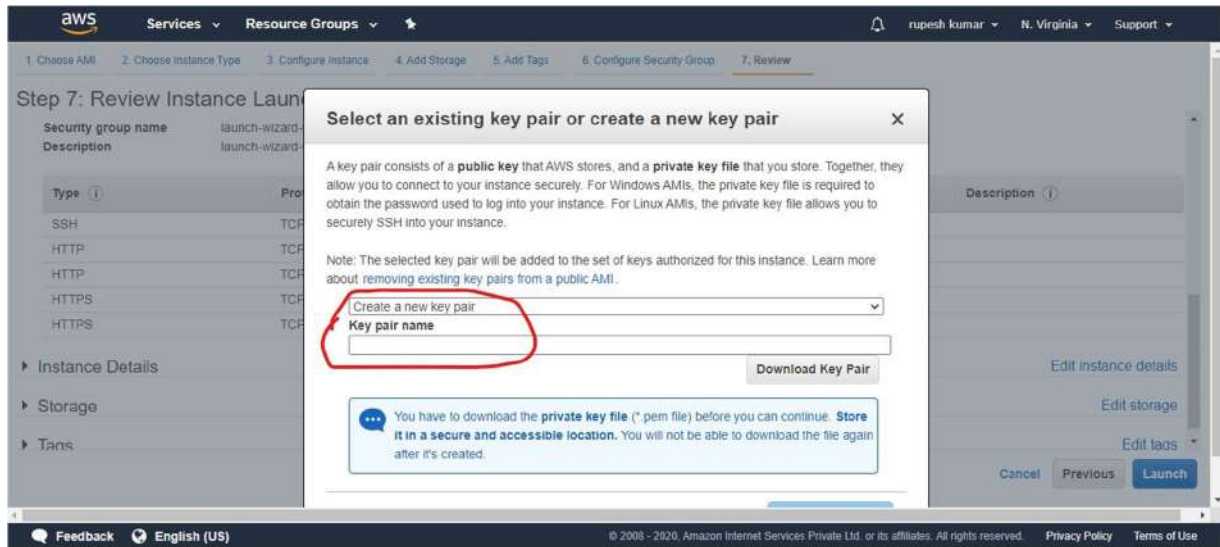
Click on **Review and launch**

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.

Create a Key Pair:

Before launching your instance, AWS uses public-key cryptography to secure the login information for your instance. A Linux instance has no password; you use a key pair to log in to your instance securely. You specify the name of the key pair when you launch your instance, then provide the private key when you login using SSH. If you haven't created a key pair already, you can create one using the Amazon EC2 console. From the navigation bar, select a region for the key pair. You can select any region that's available to you, regardless of your location. However, key pairs are specific to a region; for example, if you plan to launch an instance in the **US East (N. Virginia)** us-east-1, you must create a key pair for the instance in the **US East (N. Virginia)** us-east-1.



To connect to your instance using your key pair to connect to your Ubuntu instance from a computer running Mac or Linux, you'll specify the .pem file to your SSH client with the -i option and the path to your private key.

1.1. To connect to Amazon Ubuntu instance from linux client operating system

Command:

```
$ ssh -i key.pem ubuntu@ec2-35-164-184-80.us-east-1.compute.amazonaws.com
```

Select your instance and make sure your key (pem file) matches your key pair name

```
Terminal
~/ssh$ ssh -i amazon_aws.pem ubuntu@ec2-184-73-23-174.compute-1.amazonaws.com
The authenticity of host 'ec2-184-73-23-174.compute-1.amazonaws.com (184.73.23.174)' can't be established.
ECDSA key fingerprint is e9:ff:d3:1c:3f:a9:64:a0:cc:89:da:f1:08:30:df:10.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'ec2-184-73-23-174.compute-1.amazonaws.com,184.73.23.174' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 12.04.1 LTS (GNU/Linux 3.2.0-31-virtual i686)

 * Documentation:  https://help.ubuntu.com/

System information as of Thu Jan 31 16:09:50 UTC 2013

System load:  0.0          Processes:      66
Usage of /:   18.7% of 7.87GB Users logged in: 0
Memory usage: 6%          IP address for eth0: 10.212.101.187
Swap usage:   0%

Graph this data and manage this system at https://landscape.canonical.com/

21 packages can be updated.
8 updates are security updates.

Get cloud support with Ubuntu Advantage Cloud Guest
http://www.ubuntu.com/business/services/cloud
ubuntu@ip-10-212-101-187:~$
```



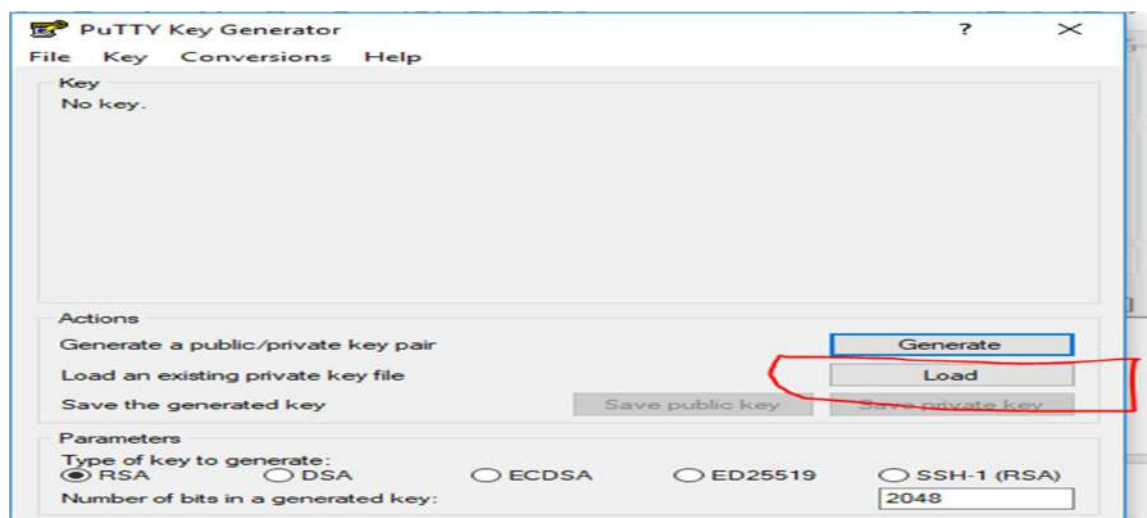

1.2. To connect to Amazon Ubuntu instance from Windows client operating system

To connect to your Ubuntu instance from a computer running Windows, you can use either MindTerm or PuTTY. If you plan to use PuTTY, you'll need to install it and use the following procedure to convert the .pem file to a .ppk file (for generation of PPK file Install Puttygen)

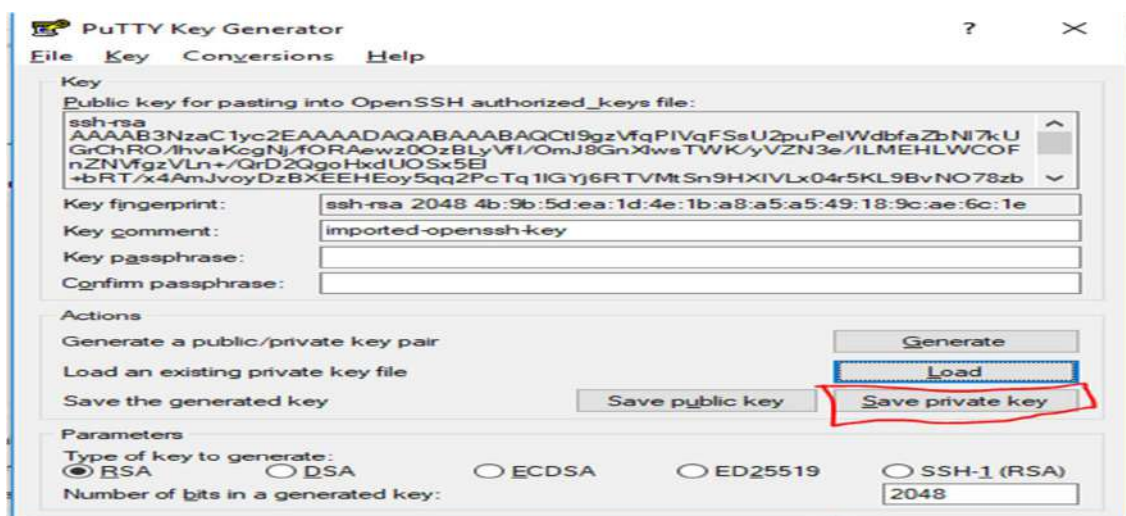
Download PuTTY: <https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>.

To prepare to connect to an Ubuntu instance from Windows using PuTTY, **CONVERT YOUR PEM FILE TO PPK FORMAT**

1. Open puttygen and load the pem file into the puttygen



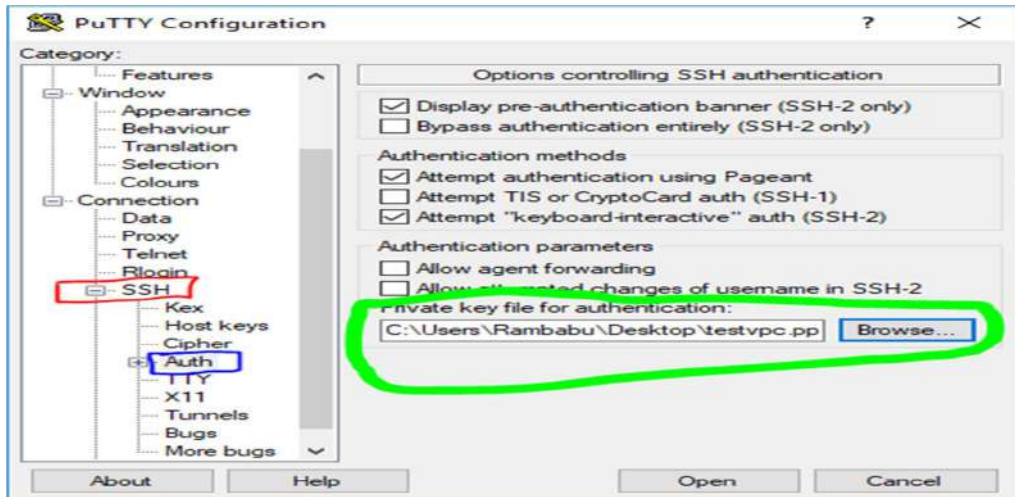
2. Save the private key by assigning a name to that file





□ Open Putty

- i. Enter Host Name
- ii. Select your PPK file.
- iii. Open your terminal Session



Installing an Ubuntu Web Server on Amazon

To install and start the Ubuntu web server.

1. Connect to your instance in putty

User name: ubuntu

```
ubuntu@ip-172-31-16-136 ~$
login as: ubuntu
Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 18.04.1 LTS (GNU/Linux 4.15.0-1021-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

System information as of Thu Dec  6 04:40:56 UTC 2018

System load: 0.0          Processes:            87
Usage of /:  14.6% of 7.69GB Users logged in:      0
Memory usage: 14%        IP address for eth0: 172.31.16.136
Swap usage:  0%

 * MicroK8s is Kubernetes in a snap. Made by devs for devs.
   One quick install on a workstation, VM, or appliance.

   - http://bit.ly/microk8s

Get cloud support with Ubuntu Advantage Cloud Guest:
  http://www.ubuntu.com/business/services/cloud

0 packages can be updated.
0 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
```



2. To ensure that all of your software packages are up to date, perform a quick software update on your instance. **\$ sudo apt-get update**
3. Now that your instance is current, you can install the Apache web server, MySQL, and PHP software packages. **\$ sudo apt-get install apache2**
4. Restart the Apache web server. **\$ service apache2 restart**
5. Also start all the web servers by executing its commands
6. If your server is installed and running, and your file permissions are set correctly, your ec2-user account should be able to create a PHP file in the /var/www/html directory that is available from the internet
7. In the web browser, type the URL of the file that you just created. This URL is the public DNS or ip address of your instance followed by a forward slash and the file name.

e.g: 54.187.117.10

