

PROJECT 1. Deploying a webserver in Windows Instance

Task 1: Create a Windows Instance using AMI: Microsoft Windows Server 2019 Base

Step 1: Choose an Amazon Machine Image (AMI)

Cancel and Exit

Microsoft Windows Server 2019 Base with Containers - ami-0860285e3eeb23175
Windows
Free tier eligible
Microsoft Windows 2019 Datacenter edition with Containers. [English]
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes
64-bit (x86) **Select**

Microsoft Windows Server 2019 Core Base - ami-0a631ae0cabf56a92
Windows
Free tier eligible
Microsoft Windows Server 2019 Semi-Annual Channel release [English]
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes
64-bit (x86) **Select**

Microsoft Windows Server 2016 Base - ami-079c8701e66753624
Windows
Free tier eligible
Microsoft Windows 2016 Datacenter edition. [English]
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes
64-bit (x86) **Select**

Task 2: Launch the Windows Instance

Launch Instance

Connect Actions

search: i-066f98ae27de5942b Add filter

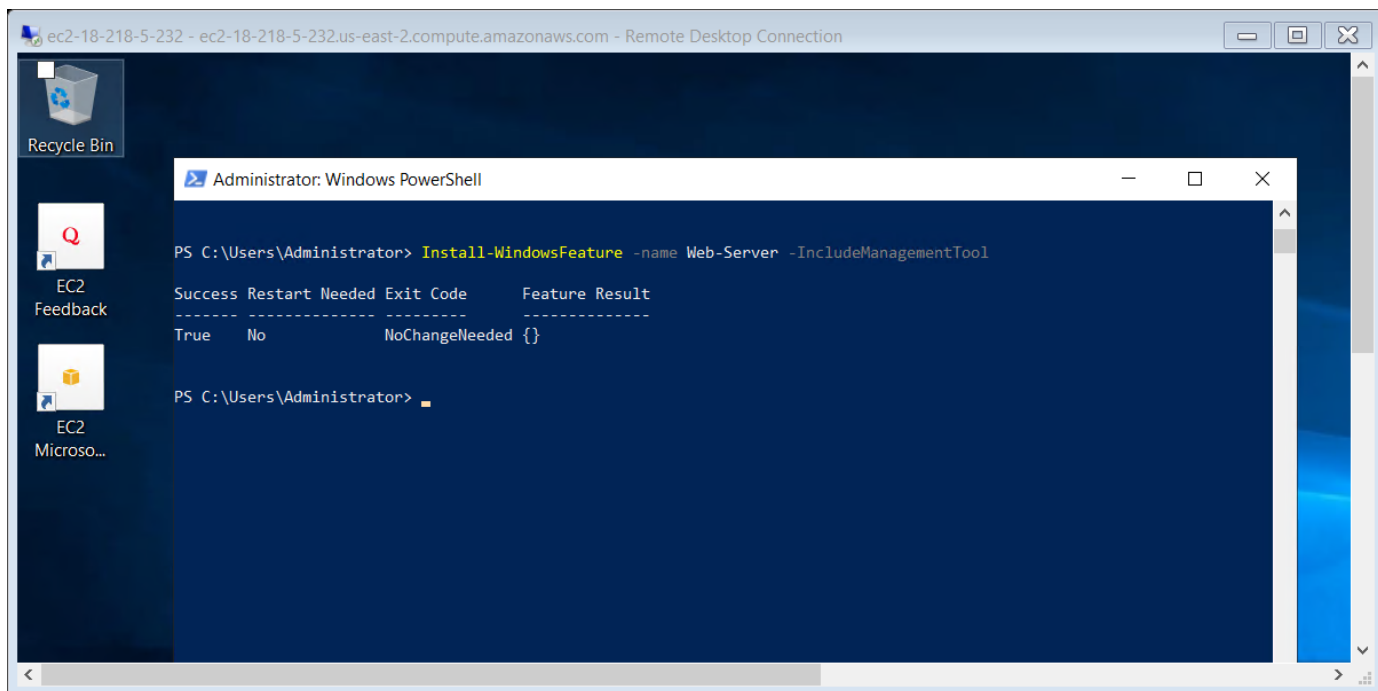
Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6
Windows	i-066f98ae27de5942b	t2.micro	us-east-2b	running	2/2 checks ...	None	ec2-18-218-5-232.us-east-2.compute.amazonaws.com	18.218.5.232	-

Instance: i-066f98ae27de5942b (Windows) Public DNS: ec2-18-218-5-232.us-east-2.compute.amazonaws.com

Description Status Checks Monitoring Tags

Instance ID: i-066f98ae27de5942b
Instance state: running
Instance type: t2.micro
Finding: Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#)
Private DNS: ip-172-31-25-155.us-east-2.compute.internal
Private IPs: 172.31.25.155
Secondary private IPs: -
VPC ID: vpc-9b74d7f0
Subnet ID: subnet-13515169
Network interfaces: eth0
Public DNS (IPv4): ec2-18-218-5-232.us-east-2.compute.amazonaws.com
IPv4 Public IP: 18.218.5.232
IPv6 IPs: -
Elastic IPs: -
Availability zone: us-east-2b
Security groups: launch-wizard-3. [view inbound rules.](#) [view outbound rules](#)
Scheduled events: No scheduled events
AMI ID: Windows_Server:2019-English-Full-Base-2020.08.12 (ami-0239d3998515e9ed1)
Platform details: Windows
Usage operation: RunInstances:0002

Task 3: Install IIS Webserver using Powershell ISE



Task 4: Verify successful Installation of IIS Webserver



PROJECT 2. Deploying a webserver (Ubuntu)

Task 1: Create a Windows Instance using AMI: Ubuntu Server 18.04 LTS(HVM)

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

SUSE Linux Enterprise Server 15 SP2 (HVM), SSD Volume Type - ami-03f4c416f489586a3 (64-bit x86) / ami-0d24f1c1ba96d2803 (64-bit Arm) **Select**

SUSE Linux
Free tier eligible
SUSE Linux Enterprise Server 15 Service Pack 2 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Ubuntu Server 18.04 LTS (HVM), SSD Volume Type - ami-0bbe28eb2173f6167 (64-bit x86) / ami-04adf33460efc8798 (64-bit Arm) **Select**

Ubuntu
Free tier eligible
Ubuntu Server 18.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (http://www.ubuntu.com/cloud/services).
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

☒ 64-bit (x86)
☐ 64-bit (Arm)

aws Services Resource Groups

New EC2 Experience Tell us what you think

EC2 Dashboard Events Tags Limits

Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations

Images AMIs

Elastic Block Store Volumes Snapshots Lifecycle Manager

Launch Instance Connect Actions

search i-017435a899d3e1e97 Add filter

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6
Ubuntu	i-017435a899d3e1e97	t2.micro	us-east-2b	running	2/2 checks ...	None	ec2-3-16-136-150.us-e...	3.16.136.150	-

Instance: i-017435a899d3e1e97 (Ubuntu) Public DNS: ec2-3-16-136-150.us-east-2.compute.amazonaws.com

Description Status Checks Monitoring Tags

Instance ID i-017435a899d3e1e97 Public DNS (IPv4) ec2-3-16-136-150.us-east-2.compute.amazonaws.com

Instance state running IPv4 Public IP 3.16.136.150

Instance type t2.micro IPv6 IPs -

Finding Opt-in to AWS Compute Optimizer for recommendations. Elastic IPs

Private DNS ip-172-31-25-114.us-east-2.compute.internal Availability zone us-east-2b

Private IPs 172.31.25.114 Security groups launch-wizard-4 view inbound rules view outbound rules

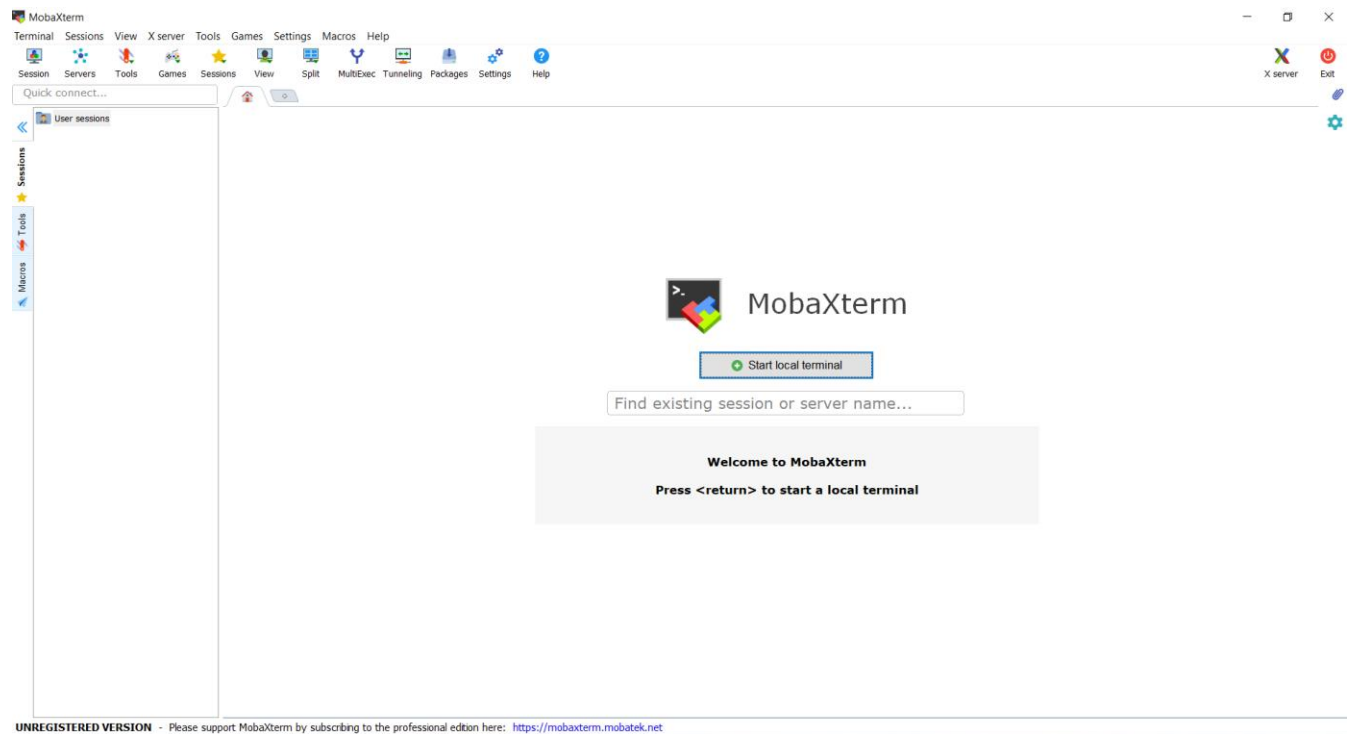
Secondary private IPs No scheduled events

VPC ID vpc-9b74d7f0 AMI ID ubuntu/images/hvm-ssd/ubuntu-bionic-18.04-amd64-server-20200810 (ami-0bbe28eb2173f6167)

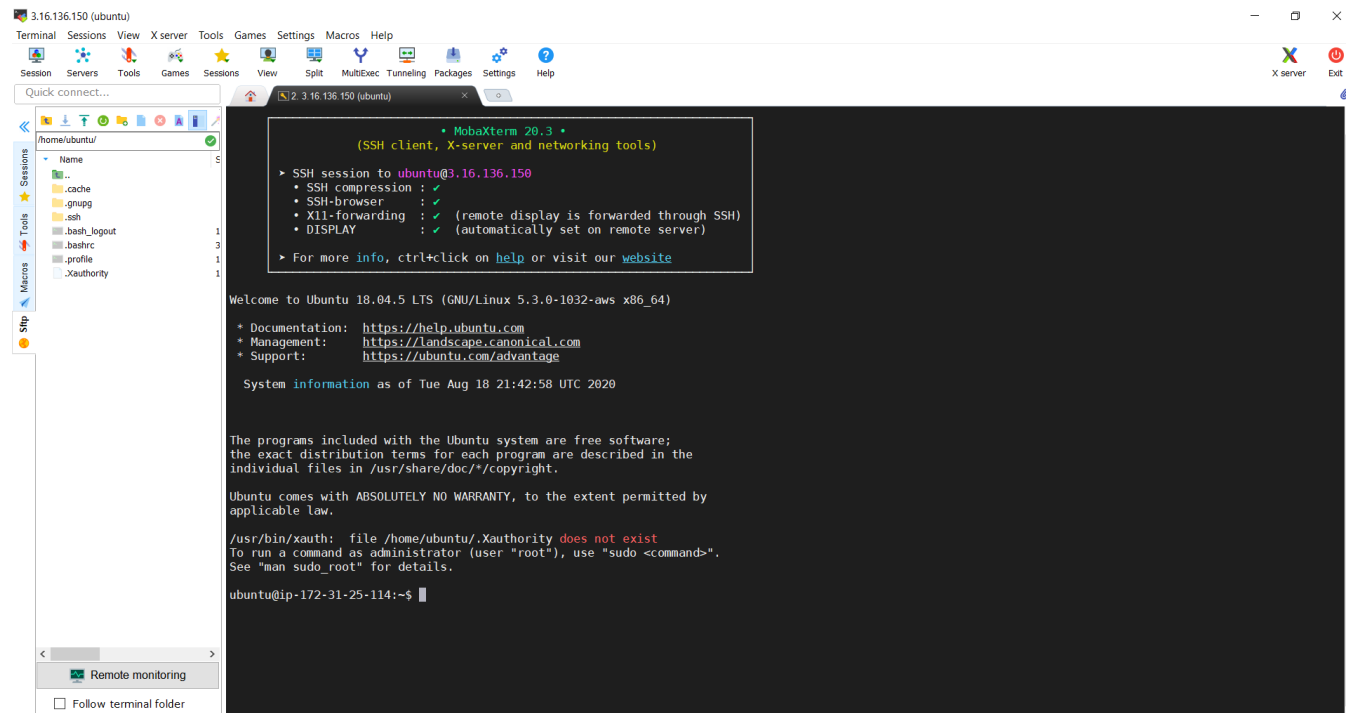
Subnet ID subnet-13515169 Platform details Linux/UNIX

Network interfaces eth0 Usage operation RunInstances

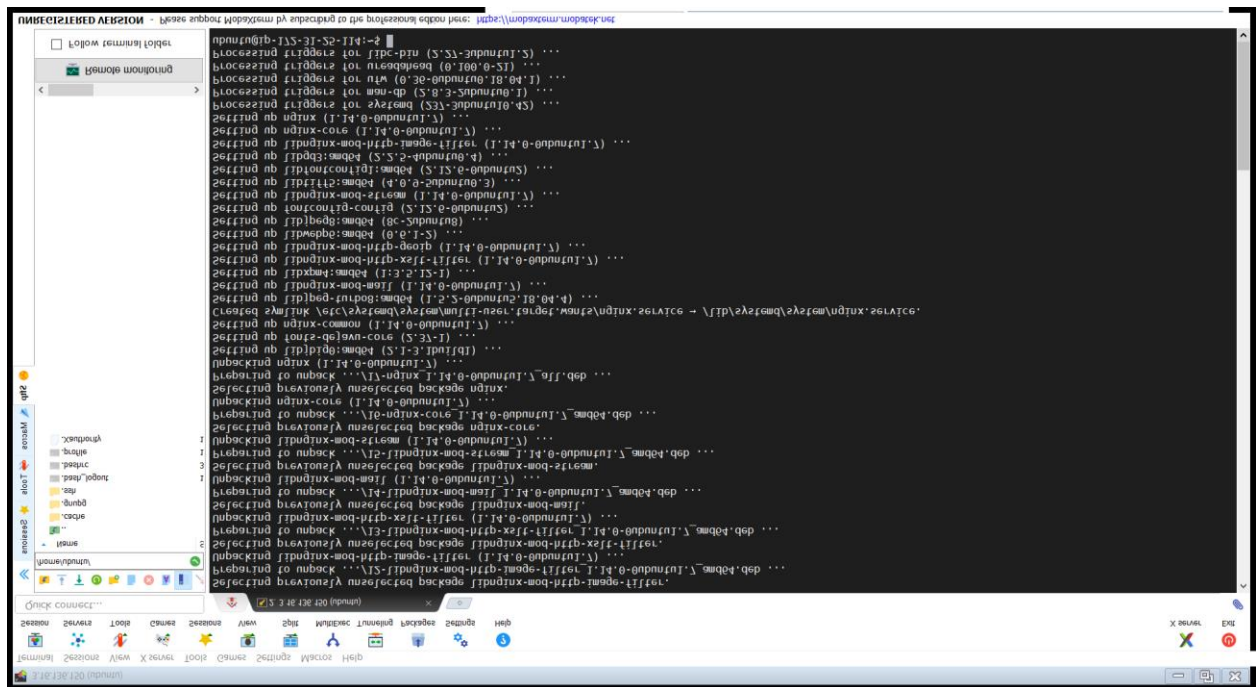
Task 2: Download and install MobaXterm Portable Edition



Task 3: Launch the ubuntu instance using SSH



Task 4: Install nginx webserver using bash



```
nginx@ubuntu:~$ sudo apt-get install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages will be installed:
  nginx nginx-core nginx-common
Suggested packages:
  nginx-doc
The following NEW packages will be installed:
  nginx nginx-core nginx-common
0 upgraded, 3 newly installed, 0 to remove and 0 not installed.
Need to get 1,144 kB of archives.
After this operation, 3,840 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu focal/main amd64 nginx-core amd64 1.14.2-4ubuntu1.1 [1,144 kB]
Get:2 http://archive.ubuntu.com/ubuntu focal/main amd64 nginx-common all 1.14.2-4ubuntu1.1 [11.5 kB]
Get:3 http://archive.ubuntu.com/ubuntu focal/main amd64 nginx amd64 1.14.2-4ubuntu1.1 [11.5 kB]
Fetched 1,167 kB in 1s (1,167 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
(Reading database ... 123456789 files and directories currently installed.)
Preparing to unpack .../nginx-core_1.14.2-4ubuntu1.1_amd64.deb ...
Unpacking nginx-core (1.14.2-4ubuntu1.1) ...
Selecting previously unselected package nginx-common.
(Reading database ... 123456789 files and directories currently installed.)
Preparing to unpack .../nginx-common_1.14.2-4ubuntu1.1_all.deb ...
Unpacking nginx-common (1.14.2-4ubuntu1.1) ...
Selecting previously unselected package nginx.
(Reading database ... 123456789 files and directories currently installed.)
Preparing to unpack .../nginx_1.14.2-4ubuntu1.1_amd64.deb ...
Unpacking nginx (1.14.2-4ubuntu1.1) ...
Setting up nginx-core (1.14.2-4ubuntu1.1) ...
Setting up nginx-common (1.14.2-4ubuntu1.1) ...
Setting up nginx (1.14.2-4ubuntu1.1) ...
invoke-rc.d: could not determine current runlevel
invoke-rc.d: policy-rc.d denied execution of start.
Processing triggers for libc-bin (2.31-0ubuntu8) ...
```

Task 5: Verify successful Installation of nginx

