



AWS ESSENTIALS

BATCH 1

PROJECTS

AMAZON EC2



PROJECT 1

EC2- CREATING AND MANAGING WINDOWS MACHINE

Create a Windows Instance Using AMI: MS Windows Server 2019 Base

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:





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

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 Free tier eligible	Microsoft Windows Server 1909 Core Base - ami-0a631ae0cabf56a92 Microsoft Windows Server 1909 Semi-Annual Channel release [English] Root device type: ebs Virtualization type: hvm ENA Enabled: Yes	Select 64-bit (x86)
 Windows	Microsoft Windows Server 2016 Base - ami-079c8701e66753624	Select

Activate Windows
Go to Settings to activate Windows.

Feedback English (US)

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I'm Cortana. Ask me anything.

11:08 PM
19-Aug-20

Launch the Windows Instance

The screenshot displays the AWS Management Console interface. The top navigation bar includes the AWS logo, 'Services', 'Resource Groups', and user information 'Kowsalya' in 'Ohio'. The left sidebar shows the 'Instances' menu with options like 'Instance Types', 'Launch Templates', and 'Spot Requests'. The main content area shows a list of instances with a search filter 'i-08668789d7ebf8509'. A table lists the instance details:

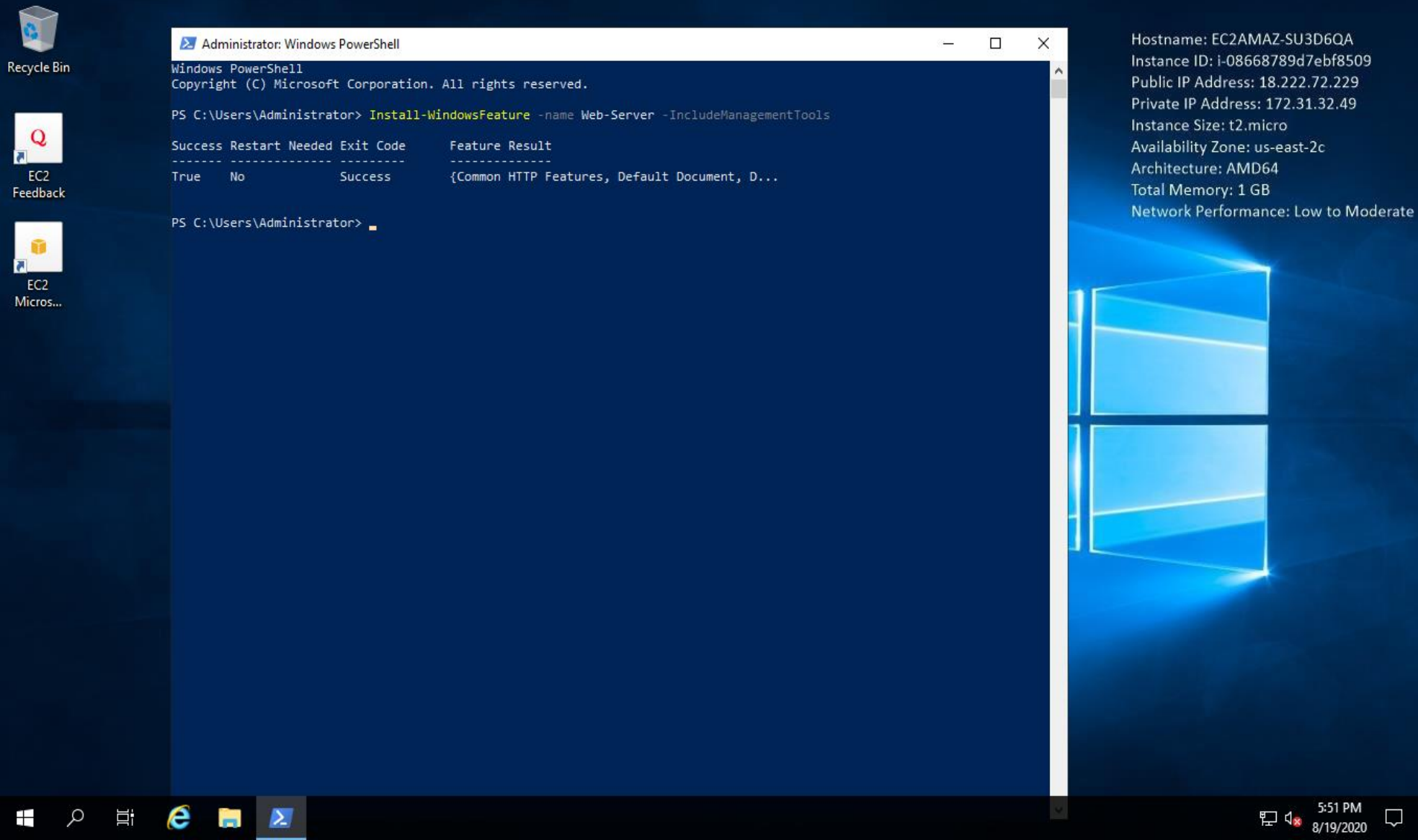
Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
Windows	i-08668789d7ebf8509	t2.micro	us-east-2c	running	2/2 checks ...	None	ec2-18-222-72-229.us-...

Below the table, the 'Description' tab is active, showing instance details:

Instance ID	i-08668789d7ebf8509	Public DNS (IPv4)	ec2-18-222-72-229.us-east-2.compute.amazonaws.com
Instance state	running	IPv4 Public IP	18.222.72.229
Instance type	t2.micro	IPv6 IPs	-

An 'Activate Windows' watermark is visible in the bottom right corner of the console area. The bottom of the image shows a Windows taskbar with the Start button, Cortana search bar, and several application icons (File Explorer, Edge, Photoshop, etc.). The system clock shows 11:13 PM on 19-Aug-20.

Install IIS Web Server Using PowerShell ISE



The screenshot displays a Windows desktop environment. On the left, the taskbar includes icons for the Recycle Bin, EC2 Feedback, and EC2 Microservices. The main area is occupied by an 'Administrator: Windows PowerShell' window. The terminal output shows the execution of the `Install-WindowsFeature` command to install the Web-Server feature, including management tools. A table summarizes the installation success, indicating no restart is needed. To the right of the PowerShell window, system information for the EC2 instance is listed, including its hostname, ID, IP addresses, size, availability zone, architecture, and memory.

Administrator: Windows PowerShell

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\Administrator> `Install-WindowsFeature -name Web-Server -IncludeManagementTools`

Success	Restart	Needed	Exit	Code	Feature	Result
True	No		Success		{Common HTTP Features, Default Document, D...	

PS C:\Users\Administrator>

Hostname: EC2AMAZ-SU3D6QA
Instance ID: i-08668789d7ebf8509
Public IP Address: 18.222.72.229
Private IP Address: 172.31.32.49
Instance Size: t2.micro
Availability Zone: us-east-2c
Architecture: AMD64
Total Memory: 1 GB
Network Performance: Low to Moderate

5:51 PM
8/19/2020

Verify the Installation of IIS Web Server

LetsUpgrade x Batch 1 | All Details | A... x AWS Essentials Training x Cloud Computing x Instances | EC2 Manage... x IIS Windows Server x

Not secure | 18.222.72.229

Windows Server

Internet Information Services

Welcome Bienvenue Tervetuloa

ようこそ Benvenuto 歡迎

Bem-vindo Bienvenido Hoş geldiniz ברוכים הבאים Welkom

Καλώς ορίσατε Vitejte Välkommen 환영합니다 Добро пожаловать Üdvözlök

مرحبا 欢迎

Willkommen Velkommen Witamy

Microsoft

Activate Windows
Go to Settings to activate Windows.

I'm Cortana. Ask me anything.

11:23 PM
19-Aug-20

AMAZON EC2



PROJECT 2

EC2- CREATING AND
MANAGING UBUNTU
MACHINE

Create a Instance Using AMI: Ubuntu Server 18.04 LTS (HVM)

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

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

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

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

64-bit (Arm)

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)

Are you launching a database instance? Try Amazon RDS. **Hide**

Amazon RDS

Amazon Relational Database Service (RDS) makes it easy to set up, operate, and scale your database on AWS by automating time-consuming 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

Microsoft Windows Server 2019 Base - ami-0239d3998515e9ed1 **Select**

Activate Windows
Go to Settings to activate Windows.

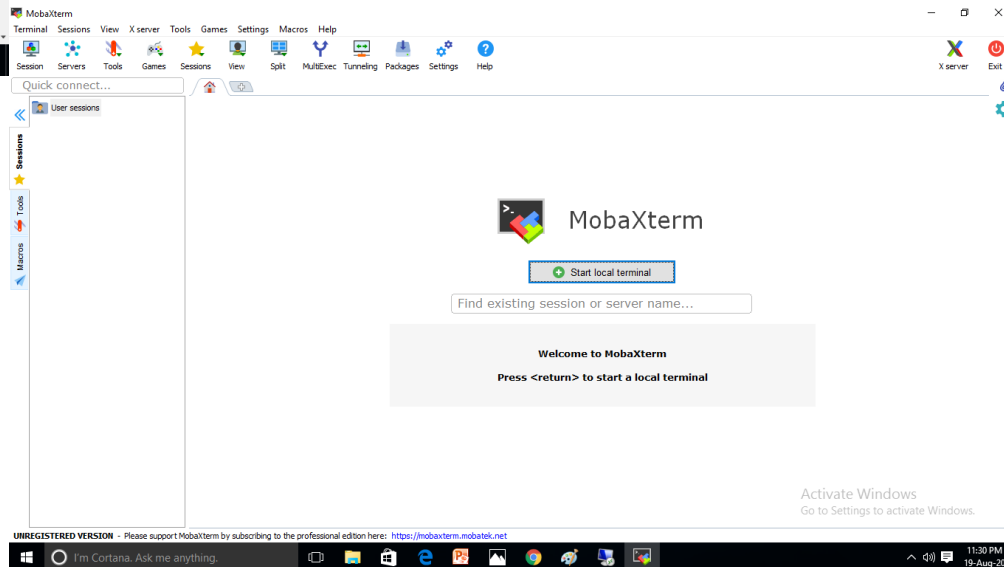
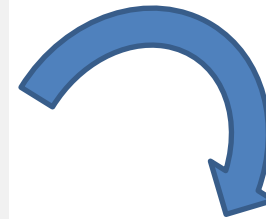
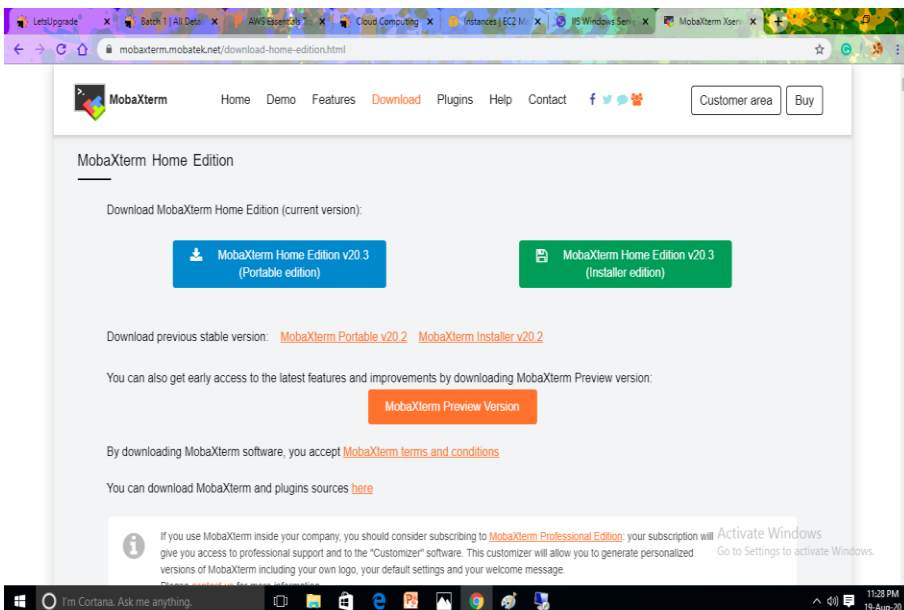
Feedback English (US)

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11:36 PM 19-Aug-20

Download and Install MobaXterm Portable Edition



Launch the Ubuntu Instance Using SSH

The screenshot displays the AWS Management Console interface. The top navigation bar includes the AWS logo, 'Services', 'Resource Groups', and user information. The left sidebar shows the 'EC2 Dashboard' and 'Instances' section. The main content area shows a table of instances with the following data:

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
Ubuntu	i-0cf540a6e94b45e3f	t2.micro	us-east-2b	running	2/2 checks ...	None	ec2-3-135-236-61.us-e...

Below the table, there are sections for 'System reachability check passed' and 'Instance reachability check passed'. At the bottom, there is a 'Submit feedback' link and an 'Activate Windows' watermark.

Install nginx Web Server Using Bash

3.135.236.61 (ubuntu)

Terminal Sessions View X server Tools Games Settings Macros Help

Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...

3. 52.15.94.64 (ec2-user) 4. 3.135.236.61 (ubuntu)

/home/ubuntu/

Unpacking libnginx-mod-http-xslt-filter (1.14.0-0ubuntu1.7) ...
Selecting previously unselected package libnginx-mod-mail.
Preparing to unpack .../14-libnginx-mod-mail_1.14.0-0ubuntu1.7_amd64.deb ...
Unpacking libnginx-mod-mail (1.14.0-0ubuntu1.7) ...
Selecting previously unselected package libnginx-mod-stream.
Preparing to unpack .../15-libnginx-mod-stream_1.14.0-0ubuntu1.7_amd64.deb ...
Unpacking libnginx-mod-stream (1.14.0-0ubuntu1.7) ...
Selecting previously unselected package nginx-core.
Preparing to unpack .../16-nginx-core_1.14.0-0ubuntu1.7_amd64.deb ...
Unpacking nginx-core (1.14.0-0ubuntu1.7) ...
Selecting previously unselected package nginx.
Preparing to unpack .../17-nginx_1.14.0-0ubuntu1.7_all.deb ...
Unpacking nginx (1.14.0-0ubuntu1.7) ...
Setting up libjpeg8:amd64 (2.1-3.1build1) ...
Setting up fonts-dejavu-core (2.37-1) ...
Setting up nginx-common (1.14.0-0ubuntu1.7) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /lib/systemd/system/nginx.service.
Setting up libjpeg-turbo8:amd64 (1.5.2-0ubuntu5.18.04.4) ...
Setting up libnginx-mod-mail (1.14.0-0ubuntu1.7) ...
Setting up libxpm4:amd64 (1:3.5.12-1) ...
Setting up libnginx-mod-http-xslt-filter (1.14.0-0ubuntu1.7) ...
Setting up libnginx-mod-http-geoip (1.14.0-0ubuntu1.7) ...
Setting up libwebp6:amd64 (0.6.1-2) ...
Setting up libjpeg8:amd64 (8c-2ubuntu8) ...
Setting up fontconfig-config (2.12.6-0ubuntu2) ...
Setting up libnginx-mod-stream (1.14.0-0ubuntu1.7) ...
Setting up libtiff5:amd64 (4.0.9-5ubuntu0.3) ...
Setting up libfontconfig1:amd64 (2.12.6-0ubuntu2) ...
Setting up libgd3:amd64 (2.2.5-4ubuntu0.4) ...
Setting up libnginx-mod-http-image-filter (1.14.0-0ubuntu1.7) ...
Setting up nginx-core (1.14.0-0ubuntu1.7) ...
Setting up nginx (1.14.0-0ubuntu1.7) ...
Processing triggers for systemd (237-3ubuntu10.42) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for ufw (0.36-0ubuntu0.18.04.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
Processing triggers for libc-bin (2.27-3ubuntu1.2) ...
ubuntu@ip-172-31-23-1:~\$

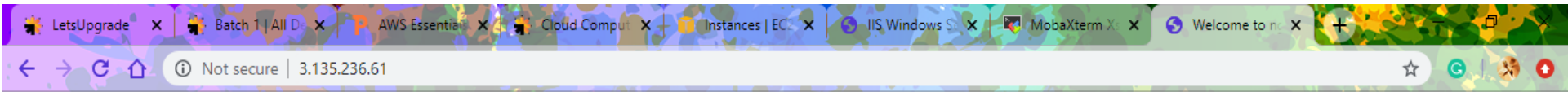
Activate Windows
Go to Settings to activate Windows.

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>

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11:44 PM
19-Aug-20

Verify the Intallation of nginx



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

Activate Windows
Go to Settings to activate Windows.



Thank You