

Lab B

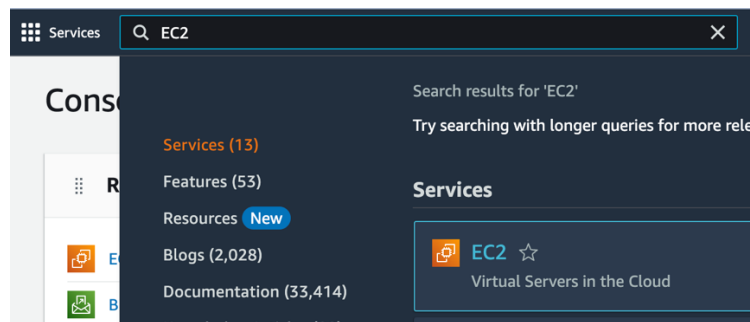
Creating a Windows EC2 instance (A Windows Server in the Cloud) using the AWS Management Console.

1. Open the Learner Lab.

From our AWS canvas dashboard choose the Learner Lab and open the Modules and then the 'Launch AWS Academy Learner Lab' link. Make sure to click the Start lab link and wait for the AWS link to have the green circle next to it and open the lab.

2. Open the EC2 service.

Search for the EC2 Service and click the blue EC2 link.



3. Launch and name a new instance

Click on the 'Launch instance' button.



Name the instance.

A screenshot of the 'Name and tags' section in the AWS Management Console. It shows a form with a 'Name' field and a 'Tags' section. The 'Name' field has a placeholder text 'e.g. My Web Server'.

4. Pick an AMI (Amazon Machine Instance).

For this lab we will use Windows from the 'Quick Start' tab (this is free tier eligible)

▼ Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Q Search our full catalog including 1000s of application and OS images

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red

Re

Q

[Browse more AMIs](#)

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Microsoft Windows Server 2022 Base

Free tier eligible ▼

ami-0be0e902919675894 (64-bit (x86))

Virtualization: hvm ENA enabled: true Root device type: ebs

5. Choose an instance type.

Choose the t2.micro (this is free tier eligible)

▼ Instance type [Info](#)

Instance type

t2.micro

Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand Windows base pricing: 0.0162 USD per Hour

On-Demand SUSE base pricing: 0.0116 USD per Hour

On-Demand RHEL base pricing: 0.0716 USD per Hour

On-Demand Linux base pricing: 0.0116 USD per Hour

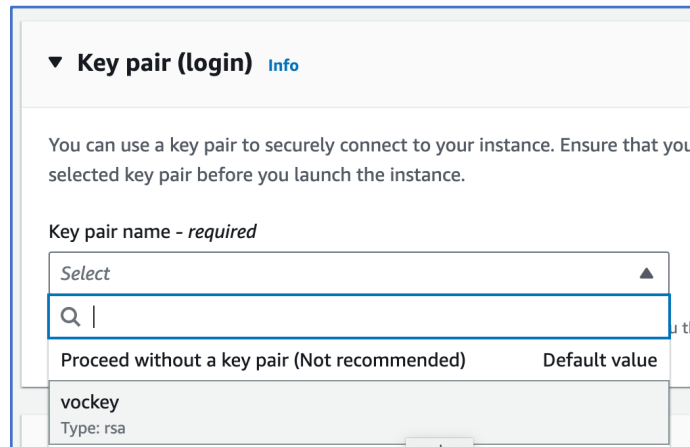
☐ All generations

[Compare instance types](#)

[Additional costs apply for AMIs with pre-installed software](#)

6. Create the key pair for login

Choose the 'vockey' type.



▼ **Key pair (login)** [Info](#)

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

Key pair name - *required*

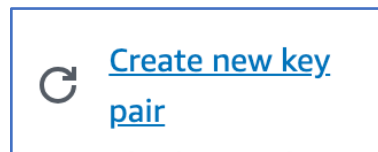
Select

Q |

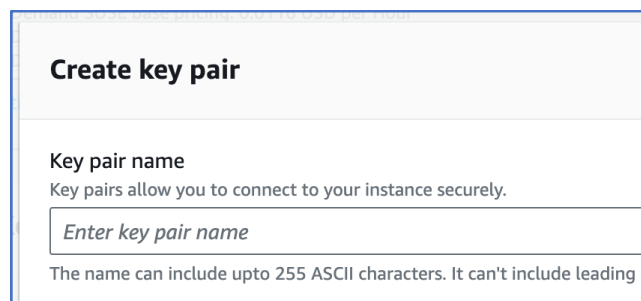
Proceed without a key pair (Not recommended) Default value

vockey
Type: rsa

Click the 'Create new key pair' link.



Give the key pair a name. This will be the name of a .pem file that will be downloaded later.



Create key pair

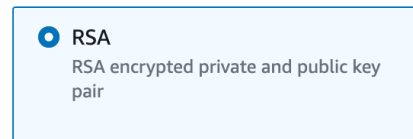
Key pair name
Key pairs allow you to connect to your instance securely.

Enter key pair name

The name can include upto 255 ASCII characters. It can't include leading c

Leave the defaults of type 'RSA' and file format of .pem.

Key pair type



☒ **RSA**
RSA encrypted private and public key pair

Private key file format



☒ **.pem**
For use with OpenSSH

Click the 'Create key pair' button.

Create key pair

This will download a .pem file. Just make note of where it is for later.

7. Finish setting up the instance.

Leave the Network settings on defaults. Our firewall is wide open, but for this lab we won't worry about that.

▼ Network settings Info

Edit

Network Info
vpc-09482789afb231732

Subnet Info
No preference (Default subnet in any availability zone)

Auto-assign public IP Info
Enable

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.

☒ Create security group ☐ Select existing security group

We'll create a new security group called 'launch-wizard-4' with the following rules:

☒ Allow RDP traffic from
Helps you connect to your instance
Anywhere
0.0.0.0/0

☐ Allow HTTPS traffic from the internet
To set up an endpoint, for example when creating a web server

☐ Allow HTTP traffic from the internet
To set up an endpoint, for example when creating a web server

Leave the storage about at the 30GB general purpose (gp2) defaults.

▼ Configure storage Info Advanced

1x 30 GiB gp2 Root volume (Not encrypted)

We are only creating one instance so leave the 'Number of instances' at 1.

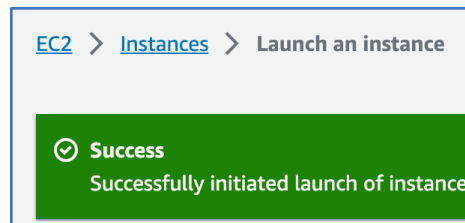
Number of instances Info

1

Click the 'Launch instance' button.

Launch instance

You will see your instance was launched successfully. Now click on the 'Instances' blue link in the breadcrumbs.

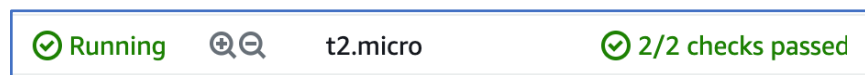


8. Wait for your instance to initialize and have 2/2 checks

You will see your 'instance state' go from pending to running, but the 'status check' will still be on initializing.



Wait several minutes until you will eventually see the 2/2 checks passed under 'status check'. Once you see this, you can begin the next steps. You may need to refresh the page.



9. Connect your instance.

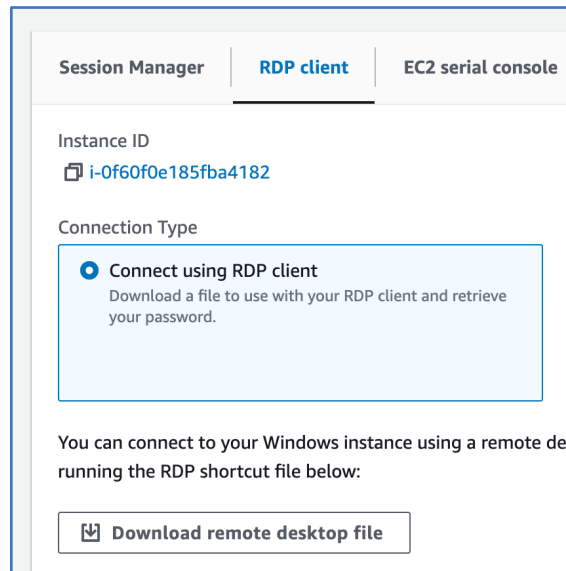
Check the box to the left of your instance name.



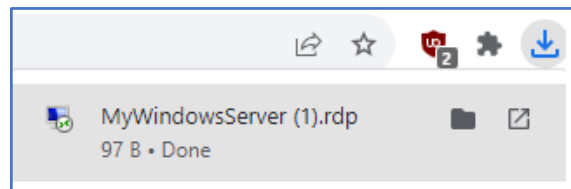
And then click 'Connect'.

Connect

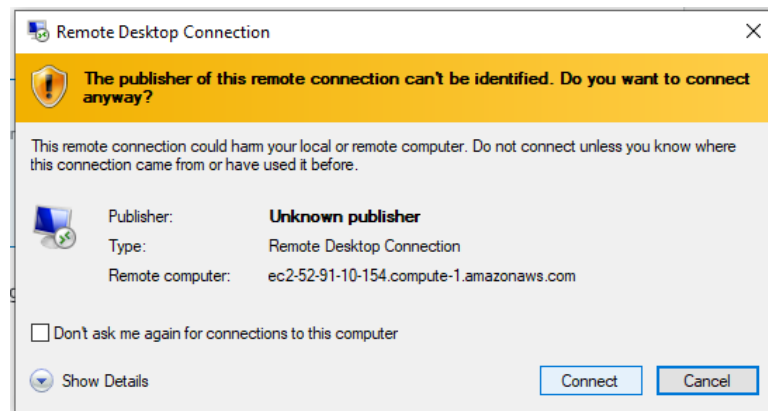
Choose the 'RDP client' tab and leave the 'Connection Type' default and click the 'Download remote desktop file'



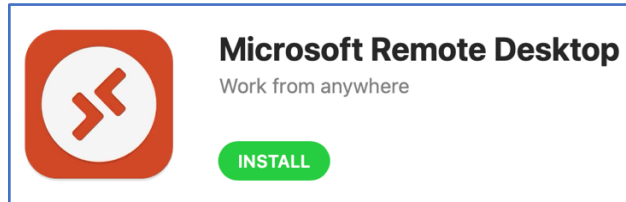
You will see a .rdp file downloaded.



Double click the .rdp file and you will see this 'Remote Desktop Connection' popup. Click 'Connect'.



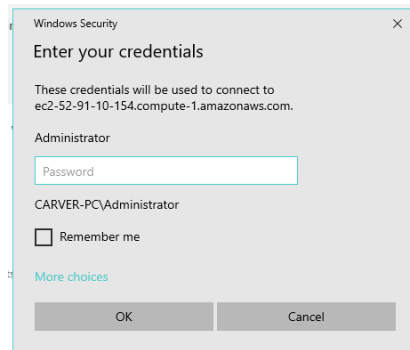
FOR MAC USERS ONLY: (Mac users may not be able to open this file. If that is the case, you can download 'Microsoft Remote Desktop Desktop and you will be able to finish the lab)



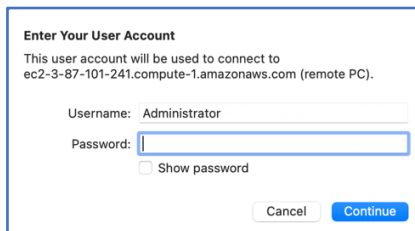
FOR EVERYONE:

It will then ask for your password which is a part of the key pair .pem file we created earlier.

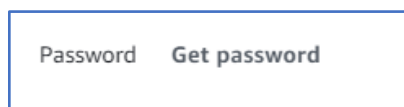
Windows:



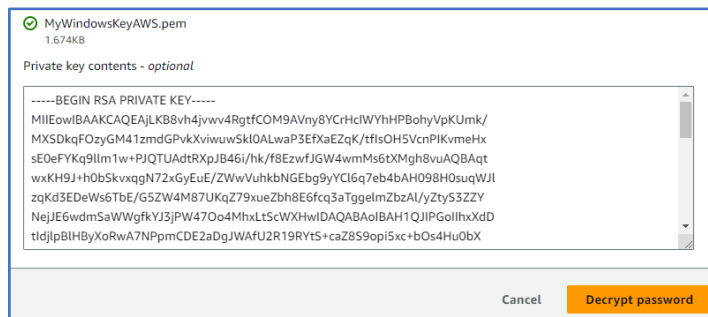
Mac:



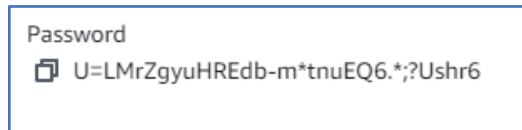
So, leave this window open and go back to your AWS Management Console and click the 'Get password' link.



Upload the .pem file you created earlier and click the 'Decrypt password' button.



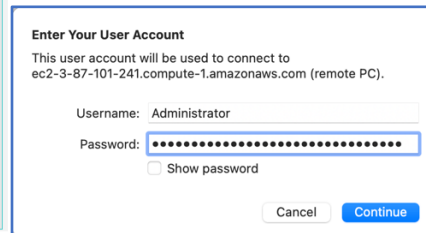
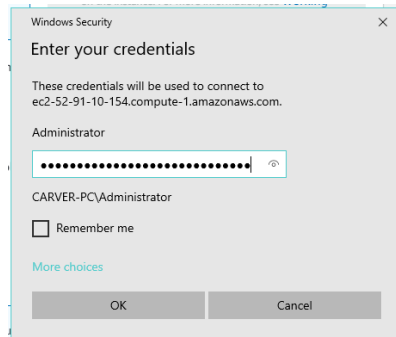
Copy the password that shows up after you've decrypted it.



Then paste is back in the 'Enter your credentials'/'Enter Your User Account' window that you still have open and click 'OK'.

Windows:

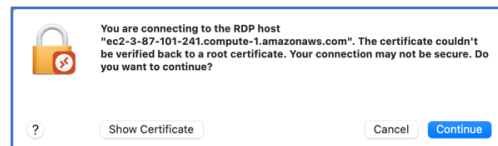
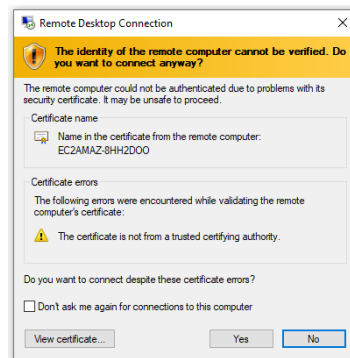
Mac:



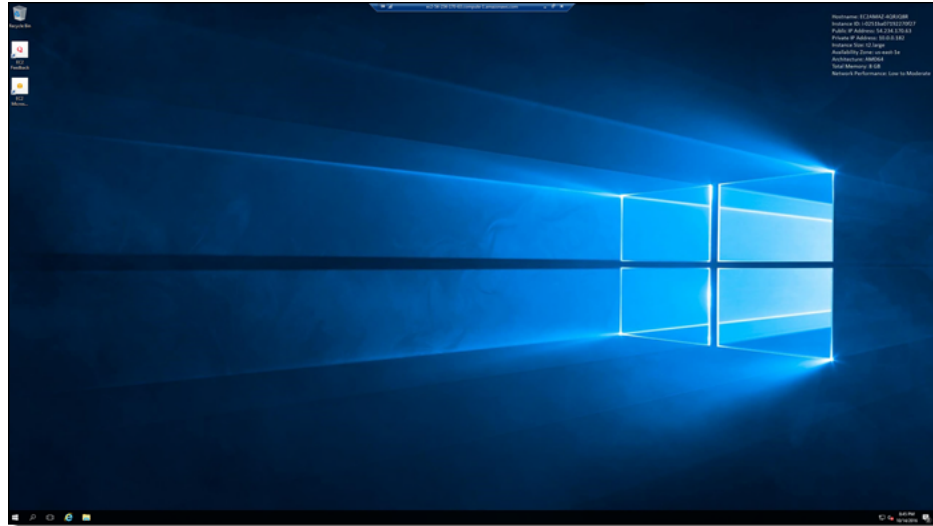
You can see this 'Remote Desktop Connection' popup. Click 'Yes'/'Connect'.

Windows:

Mac:



Your Windows Server will now take a moment to open.



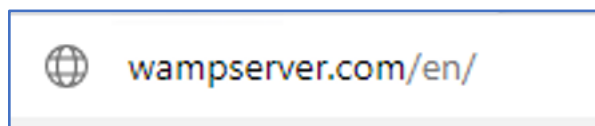
We now have a cloud windows server. Very cool! Let's play around with it before disconnecting from our instance.

Let's add the WAMP software stack that allows you to set up a server.

Open the Edge browser. It might ask if you want to sync to your MS account. You don't need to.



When you get past any setup it's asking about. Go to wampserver.com/en/



Click Download.



Click WAMPserver 64 bits.

A yellow rectangular button with a black border and a slightly distressed, hand-painted appearance. The text "WAMP SERVER 64 BITS (X64) 3.2.6" is written in black, uppercase, sans-serif font, centered within the button.

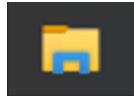
Click the 'you can download it directly' link if you don't want to enter all your information.

A blue rectangular button with a thin black border. The text "you can download it directly." is written in a blue, lowercase, sans-serif font, centered within the button.

It will take you to sourceforce.net and the download will start automatically.



Give it a few minutes to download. After a few minutes, you will have an .exe file in File Explorer in Downloads.

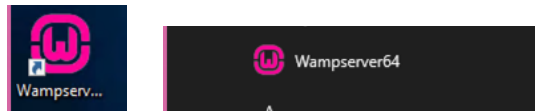


After you see the wampserver#.#.#_x64.exe file you can close Edge.

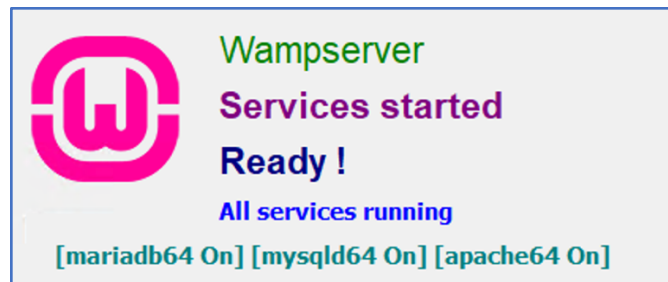
Double click the .exe file and accept the agreement and run the install wizard with all defaults (no need to install any patches).

It will take a few minutes to install. It may ask if you want to use a different browser than Edge and a different editor than Notepad, just say no since we haven't downloaded any others.

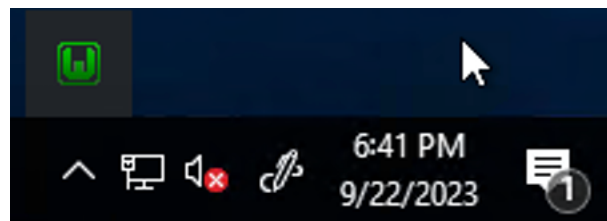
When it's done installing you will see the WAMP icon shortcut on the desktop, or see it when you click the windows button. Go ahead and start the WAMP server.



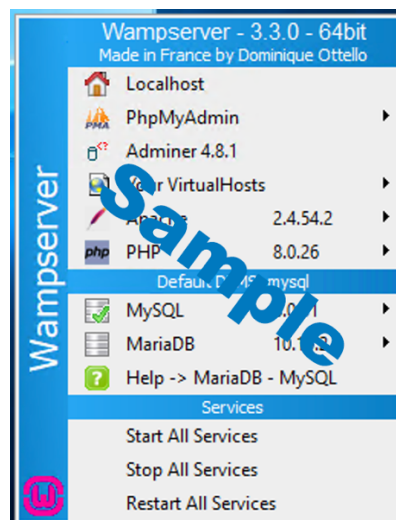
It will take a minute for it to start. You may see some windows flashing open and closed and you will eventually see this:



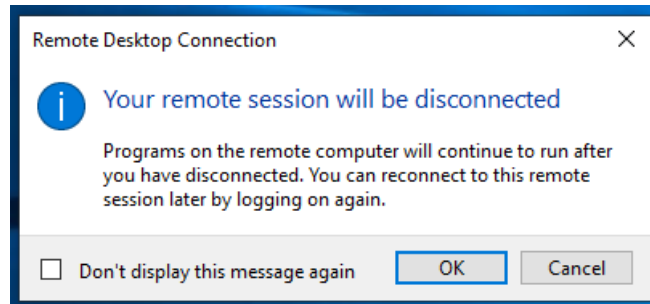
Once it's started you will see a green WAMP icon from your task bar arrow. If it's green the WAMP server is running.



Click the green icon and you will see your menu for the WAMP server. Take a screen shot of this menu to turn in for the assignment.

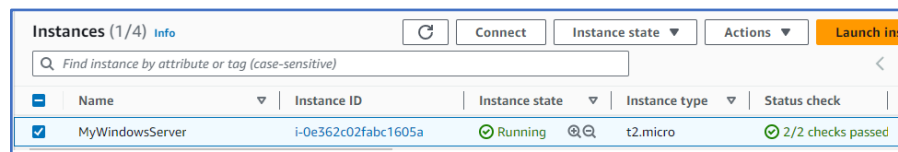


You can play around in the Windows server more if you'd like and when you are done, close it with the 'X' at the top of the remote server window. It will verify that you want to disconnect. Click 'OK'.

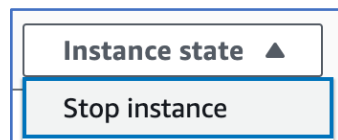


10. Stop your instance from running.

Go back to your list of instances and check the check box next to your instance.

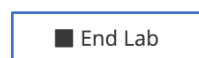


Click the 'Instance state' drop down and choose 'Stop instance'. You don't want to leave your instances running if you are not using them.



You can terminate your instance if you'd like, but it is not necessary. It will start running again when you return to the Learner Lab, so keep that in mind but we chose an instance that should not cost much where it was in the free tier.

Click 'End Lab' in Learner Lab.



That it, great job!