

# Lab B

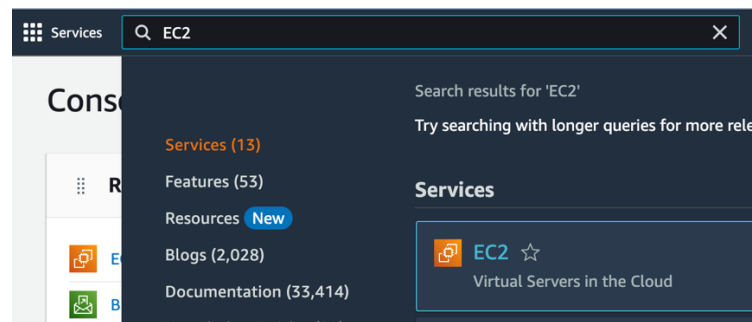
## Creating a Windows EC2 instance (A Windows Server in the Cloud) using the AWS Management Console.

### 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 label 'Name' and a text input field. Below the input field, there is a placeholder text 'e.g. My Web Server'. There is also a link 'Info' next to the section title.


#### 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


**Quick Start**




Amazon Linux




macOS




Ubuntu



Windows



Red Hat



[Browse more AMIs](#)

Including AMIs from AWS, Marketplace and the Community

**Amazon Machine Image (AMI)**

Microsoft Windows Server 2022 Base  
ami-0be0e902919675894 (64-bit (x86))  
Virtualization: hvm   ENA enabled: true   Root device type: ebs

Free tier eligible ▼

#### 5. Choose an instance type.

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

**▼ Instance type** [Info](#)

**Instance type**

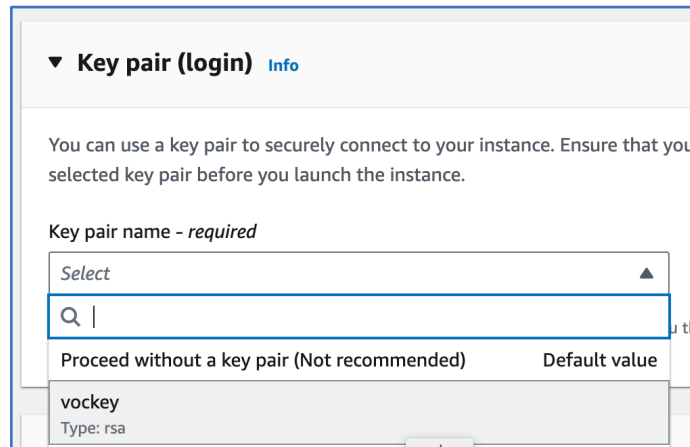
**t2.micro** Free tier eligible  
Family: t2   1 vCPU   1 GiB Memory   Current generation: true  
On-Demand Windows base pricing: 0.0162 USD per Hour  
On-Demand SUSE base pricing: 0.0116 USD per Hour  
On-Demand RHEL base pricing: 0.0716 USD per Hour  
On-Demand Linux base pricing: 0.0116 USD per Hour

☐ 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*

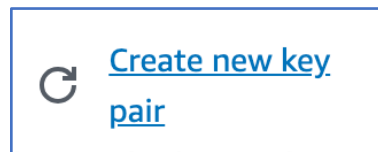
Select

Q |

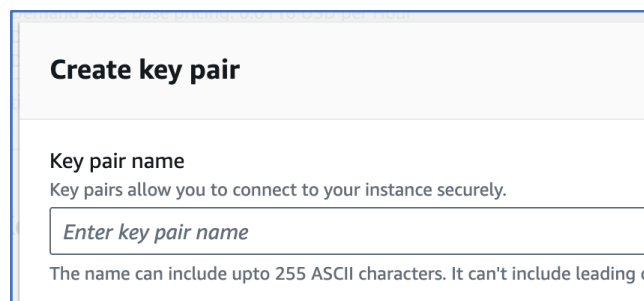
Proceed without a key pair (Not recommended) Default value

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**

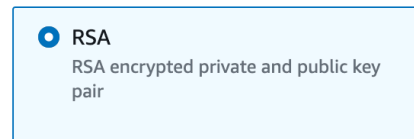
**Key pair name**  
Key pairs allow you to connect to your instance securely.

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

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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.

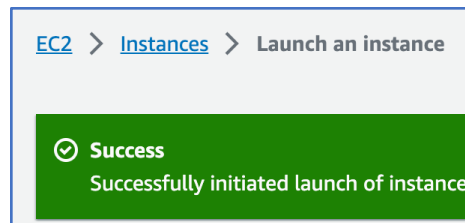
Number of instances Info

1

Click the 'Launch instance' button.

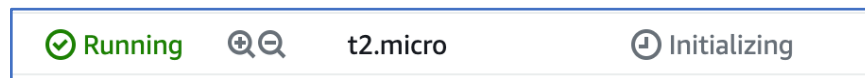
**Launch instance**

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

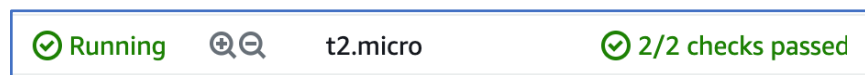


## 8. Wait for your instance to initialize and have 2/2 checks

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.

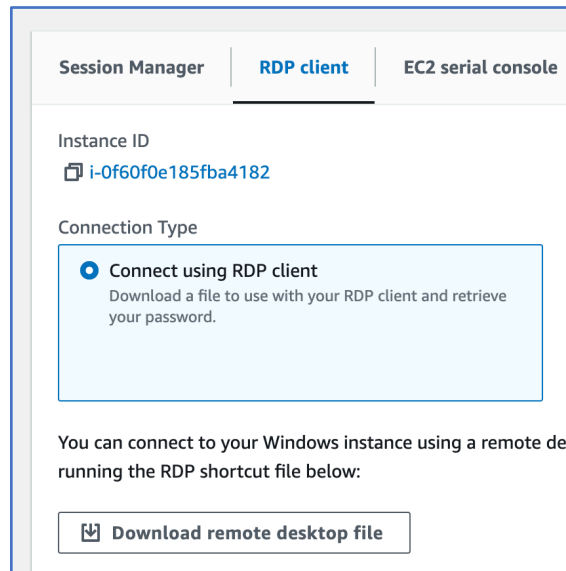
Check the box to the left of your instance name.



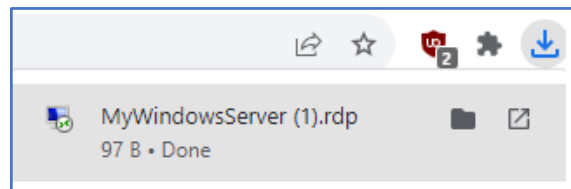
And then click 'Connect'.

**Connect**

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

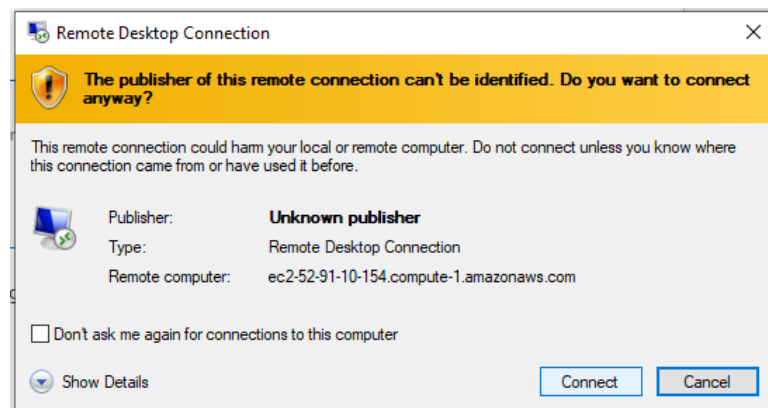


You will see a .rdp file downloaded.

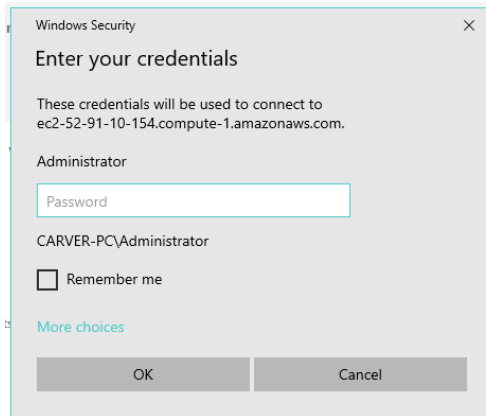


*(From this point on in the lab, you will need a windows computer to finish the lab. Partner up with a Windows user during lab)*

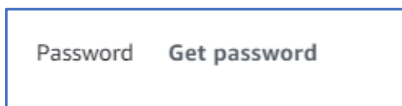
Double click the .rdp file and you will see this 'Remote Desktop Connection' popup. Click 'Connect'.



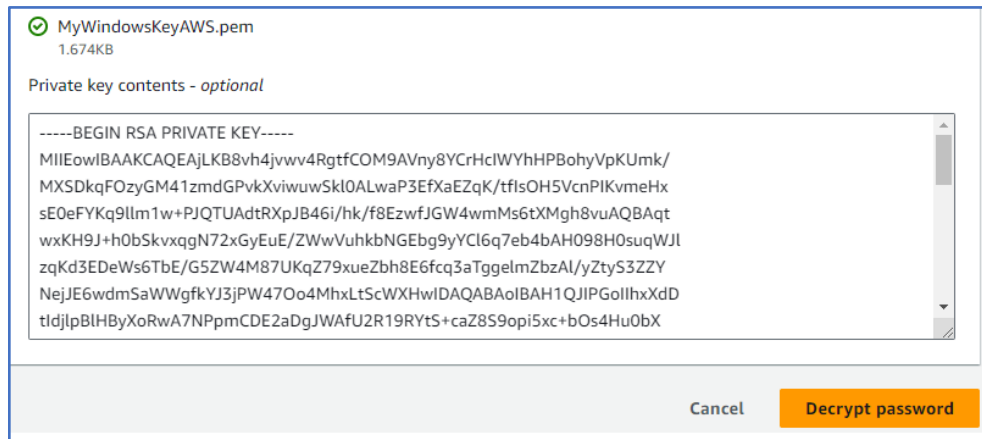
It will then ask for your password which is a part of the key pair .pem file we created earlier.



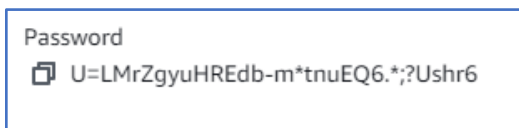
So, leave this window open and go back to your AWS Management Console and click the 'Get password' link.



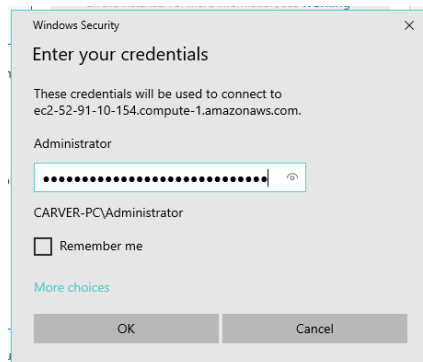
Upload the .pem file you created earlier and click the 'Decrypt password' button.



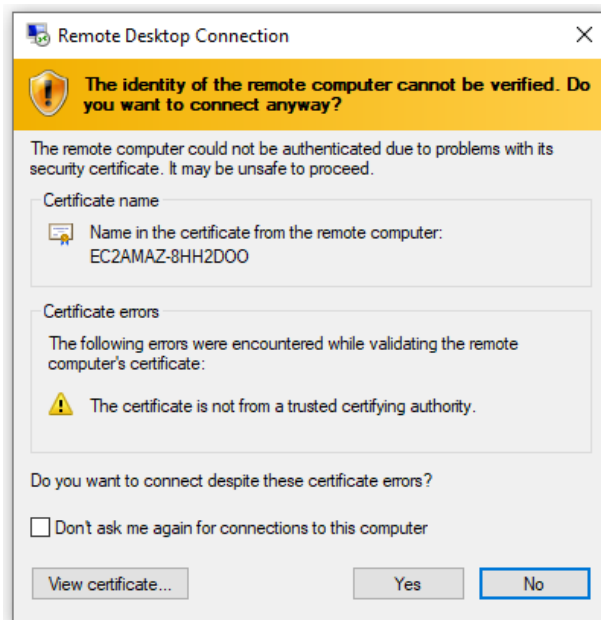
Copy the password.



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

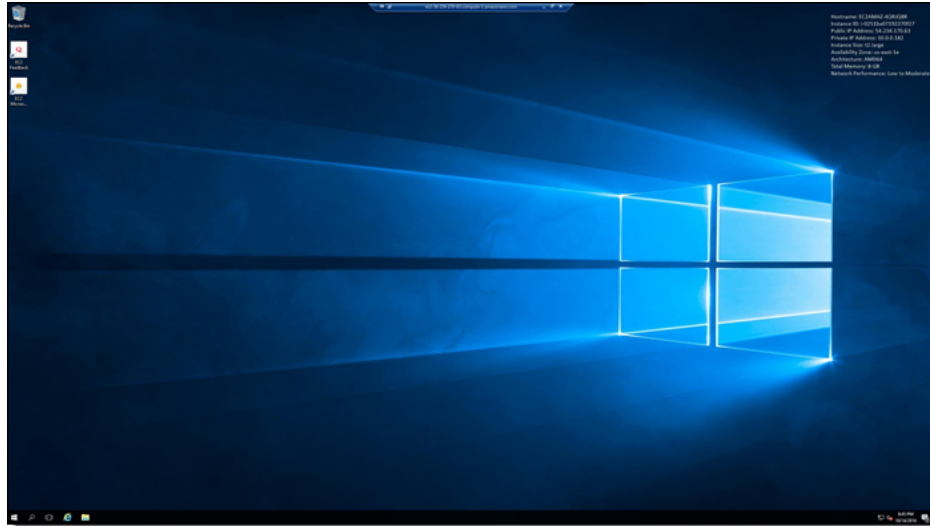


You can see this 'Remote Desktop Connection' popup. Click 'Yes'.

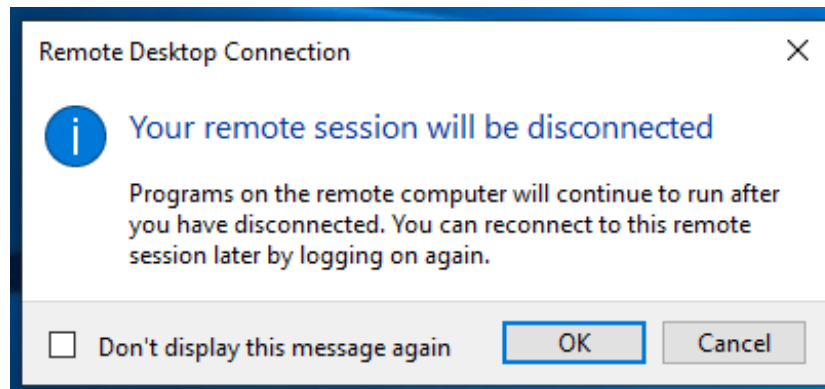


Your Windows Server will now take a moment to open. It will look like a regular Windows computer/server. We won't be doing anything with it today.



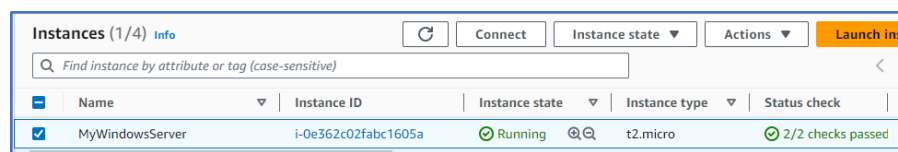


***For points for this lab, have your instructor come look that you have the window's server open.*** When you are done looking at it a bit, close it with the 'X' at the top of the remote server window. It will verify that you want to disconnect. Click 'OK'.



## 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.

That it, great job!