



amazon **EC2**  
WINDOWS

## ➤ EC2 WINDOWS INSTANCES:

- Amazon EC2 running Microsoft Windows Server (2003 R2, 2008, 2008 R2, 2012 and 2012 R2, 2016, 2019 and 2022) is a secure, reliable, and high-performance environment for deploying Windows-based applications and workloads. You can provision instances quickly, and scale up or scale down as you need it, while only paying for what you use.
- Amazon EC2 makes it easy to start and manage your Windows-based instances. Amazon EC2 provides you with several pre-configured AMIs that allow you to start running instances in minutes.
- An instance is a virtual server in the AWS Cloud. With Amazon EC2, you can set up and configure the operating system and applications that run on your instance.

## LOGIN USERNAME:

- The default username for the Administrator account depends on the language of the operating system (OS) contained in the AMI.
  - **Administrator (English)**
  - Administrateur (French)
  - Administrador (Portuguese)

## PORT IN SG:

- Remote Desktop Protocol (RDP) is a secure network communication protocol that allows users to remotely control and operate computers
- **Remote Desktop Protocol (RDP): 3389**

## GETTING ADMIN PASSWORD:

- Upload private key file and navigate to the private key (**.pem**) file that you specified when you launched the instance.
- Choose Decrypt password.

**Actions -> Get Password -> Upload Private Key -> Returns Password**

**NOTE:** If the RDP connection is successful, the RDP client displays the Windows login screen and then the Windows desktop. If you receive an error message instead, see Remote Desktop can't connect to the remote computer. When you are finished with the RDP connection, you can close the RDP client.

## WEB SERVER-IIS:

- **Internet Information Services (IIS)** is a web server that you can use on an Amazon Elastic Compute Cloud (Amazon EC2) Windows Server instance to host multiple websites:
- IIS is a Microsoft web server that runs on Windows systems to serve HTML pages and files. It can be used to host, deploy, and manage web applications.
- IIS accepts requests from remote client computers and returns the appropriate response. It can share and deliver information across local area networks (LAN) and wide area networks (WAN).
- IIS may or may not be enabled by default in the Windows Server EC2 instance. To enable it, you can launch Server Manager and select Manage > Add Roles and Feature.

## PORTS IN SG's:

- HTTP (Hypertext Transfer Protocol) : 80

## ➤ WINDOWS BOOTSTRAPPING / USER DATA:

- **Run commands** on your ec2 instance **at launching**.
- At launch an instance, you can pass user data to the instance that is used to perform automated configuration tasks, or run scripts after the instance starts
- In this lab, we configure a web server to corporate standards, noting how much effort it can take to walk through these steps manually each time. We then learn how to bootstrap an instance using a user data script, allowing us to automatically build servers.

User data - optional [Info](#)  
Upload a file with your user data or enter it in the field.

```
<powershell>

#Installing MS IIS Server
Install-WindowsFeature -name Web-Server -IncludeManagementTools

#Start the IIS Web Server
Start-Service -Name W3SVC

#Setup a Basic html File
$webpagePath = "C:\inetpub\wwwroot\index.html"
@"
<DOCTYPE html>
<html>
<body bgcolor=red text=yellow>
<marquee><H1> WELCOME TO IIS WEBSERVER...! </H1></marquee>

```

User data has already been base64 encoded

## User Data for IIS Web Server:

```
<powershell>
#Installing MS IIS Server
Install-WindowsFeature -name Web-Server -IncludeManagementTools

#Start the IIS Web Server
Start-Service -Name W3SVC

#Setup a Basic html File
$webpagePath = "C:\inetpub\wwwroot\index.html"
@"
<!DOCTYPE html>
<html>
<body bgcolor=red text=yellow>
<marquee><H1> WELCOME TO IIS WEBSERVER...! </H1></marquee>
</body>
</html>
"@ | Out-File -FilePath $webpagePath

#Restart the IIS Service
Restart-Service -Name W3SVC
</powershell>
```

```
<persist>>true</persist>
```

**NOTE:** When you include `<persist>>true</persist>`, the script is run every time you reboot or start the instance.

## VIEW / UPDATE USER DATA:

You can view the instance user data for any instance, and you can update the instance user data for a stopped instance.

### To update the user data for an instance using the console

1. Open the Amazon EC2 console at <https://console.aws.amazon.com/ec2/>.
2. In the navigation pane, choose **Instances**.
3. Select the instance and choose **Actions, Instance state, Stop instance**.

#### Warning

When you stop an instance, the data on any instance store volumes is erased. To keep data from instance store volumes, be sure to back it up to persistent storage.

4. When prompted for confirmation, choose **Stop**. It can take a few minutes for the instance to stop.
5. With the instance still selected, choose **Actions, Instance settings, Edit user data**. You can't change the user data if the instance is running, but you can view it.
6. In the **Edit user data** dialog box, update the user data, and then choose **Save**. To run user data scripts every time you reboot or start the instance, add `<persist>>true</persist>`, as shown in