

# IBM LinuxONE Bootcamp / Techzone Guide

## **LinuxONE virtual server provisioning**

*Last updated October 6<sup>th</sup>, 2025*

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## Synopsis

This document shows how to provision a virtual Linux Guest server from IBM Techzone cloud environment.

## Introduction

This hands-on lab environment is accessible via IBM Technology Zone and can be provisioned only by IBM employees and IBM Business Partners. Once provisioned, however, the environment's connection details can be shared with anyone and accessed via the public internet for cases when clients want to get hands-on.

## Lab Environment

The lab exercises will be performed on Red Hat Linux 9.x guests running on IBM Z system Cloud environment hosted from IBM Techzone

## Lab Access



1. The lab exercises will be performed on Red Hat Linux 9.x guests running on IBM Z system Cloud environment hosted from IBM Techzone
2. To access the IBM Techzone (Cloud environment) you will need an IBMid
3. If you have IBMid, proceed to step 4, otherwise execute the following steps to create the IBMid:



### Creating an IBMid

Visit the [IBM ID registration page](#). Fill in your email address, add your first and last name, create a password and specify your country of residence. Click Next.

Already have an IBM account? [Log in](#)

---

 Account information 

Business email 	Password 
<input type="text"/>	<input type="password"/>
Email is required	
First name	Last name
<input type="text"/>	<input type="text"/>
Country or region of residence	Company
<input type="text" value="United States of America"/>	<input type="text"/>
<input type="button" value="Next"/>	

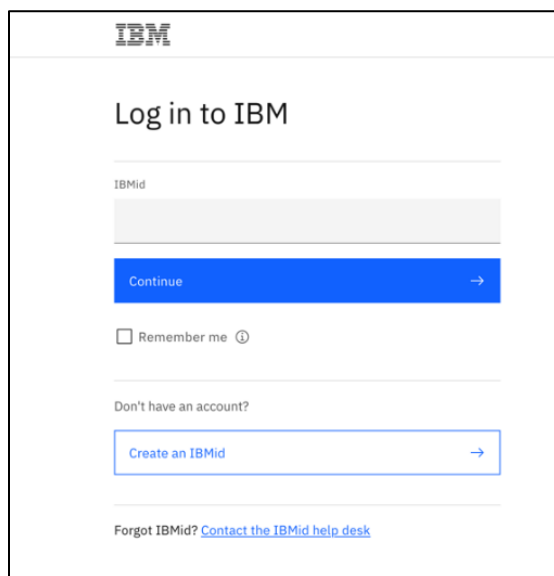
After clicking Next, a verification code will be sent to your email address. Copy and paste the code from your email into the verification box. Click Next.

Note: check your spam folder or firewall settings if the verification email is not received within 5 minutes.

4. Once you have the IBMid credentials follow these steps

Find the Collection in TechZone

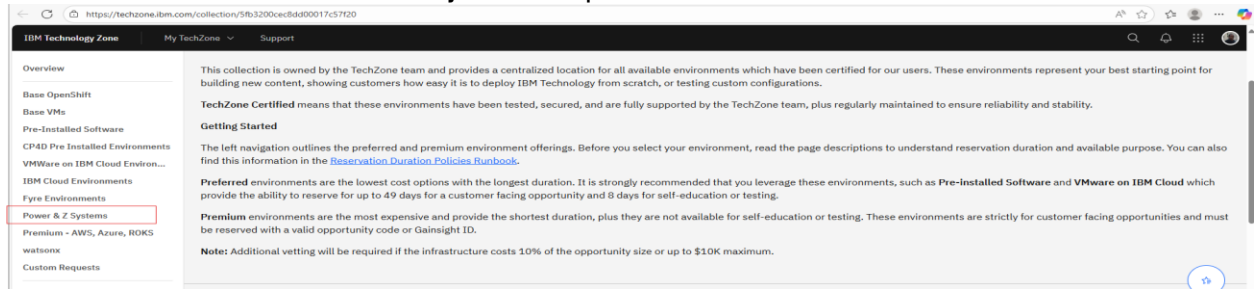
1. Login to [IBM Technology Zone](#) with your IBMid credentials:

A screenshot of the IBM login page. At the top is the IBM logo. Below it is the heading "Log in to IBM". There is a text input field labeled "IBMid" with a grey background. Below the input field is a blue button with the text "Continue" and a right-pointing arrow. Underneath the button is a checkbox labeled "Remember me" with a small information icon. Below that is the text "Don't have an account?". Underneath is a text input field with the text "Create an IBMid" and a right-pointing arrow. At the bottom, it says "Forgot IBMid?" followed by a link "Contact the IBMid help desk".

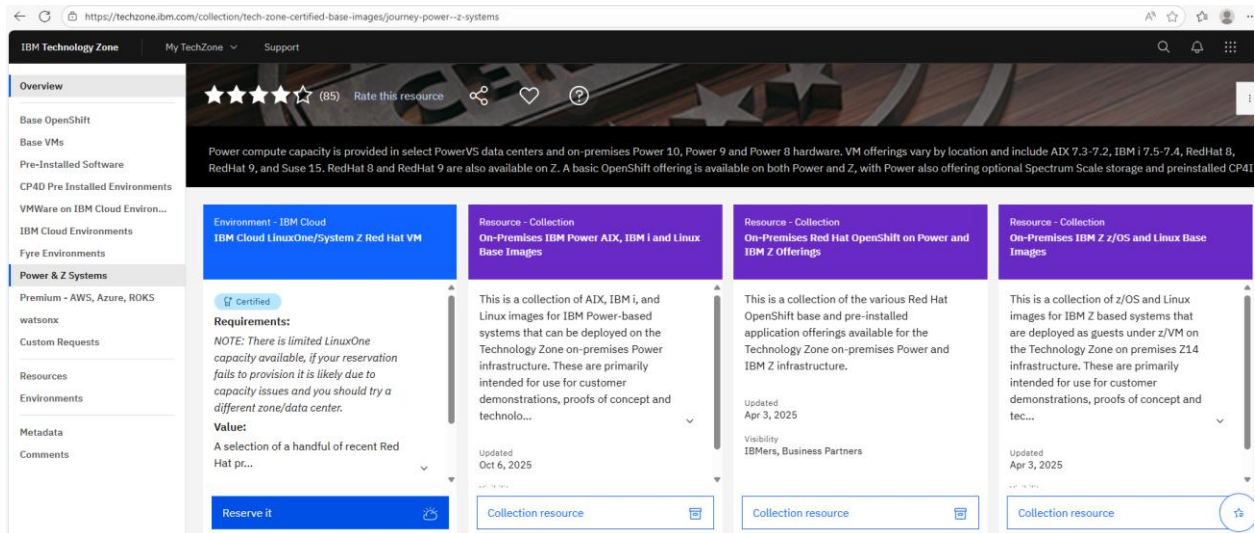
2. Using the search bar on the top right of the dashboard page, search for 'Certified Base Images' under Resources. Select that collection.



In the left hand tool bar section, you will see multiple collections and in that you must select the ‘Power and Z systems’ option.

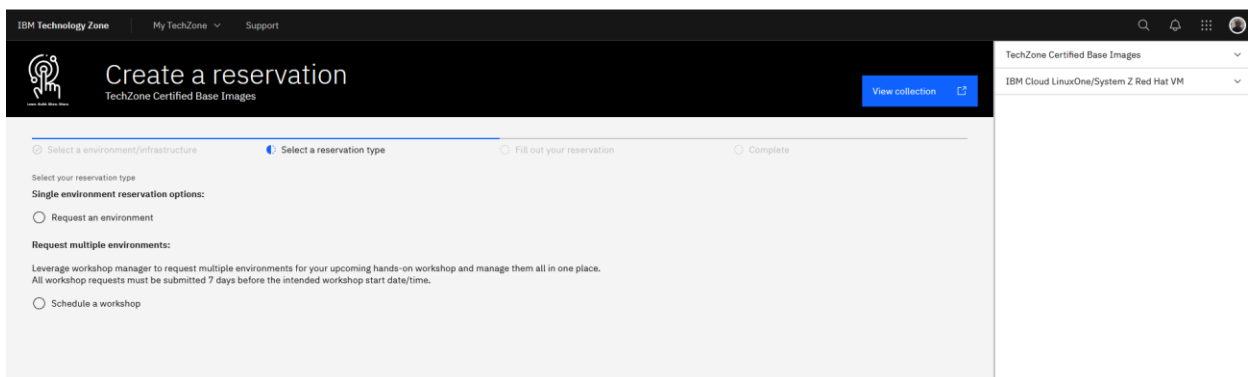


3. Under “ Environment - IBM Cloud **IBM Cloud LinuxOne/System Z Red Hat VM**” section click on the ‘Reserve it’ button.



## Provision the Lab Environment

4. On the next page, click on the ‘Request an environment’ option under Single environment reservation options:



5. Select the 'Purpose' for your environment. Note that this selection affects how long you can reserve this environment.

- **Demo:** 4 days with 4-day extensions available up to three weeks – valid sales opportunity number required
- **Education:** 2 days with two 2-day extensions available up to six days – description required
- **Pilot:** 7 days with two 7-day extensions available up to two months – valid IBM Opportunity ID required
- **Test:** 12 hours with two 12-hour extensions available up to two days – description required

IBM Technology Zone My TechZone Support

## Create a reservation

TechZone Certified Base Images [View collection](#)

Select a reservation type

Name: IBM Cloud LinuxOne/System Z Red Hat VM

Name this reservation. This will help identify it in your reservation list.

**Purpose**

**Demo**  
Deliver a client specific demonstration based on discovery with the client and aligns to the identified architecture. Automatically captures a Technical Sales Activity in IBM Sales Cloud on the Opportunity code provided.

**Education**  
Gaining experience with specific technology, product, or solution.

**Pilot**  
Rapid co-creation build that proves IBM technologies can deliver business value to clients' end users. Serves as a foundation to build a production solution. Automatically captures a Technical Sales Activity in IBM Sales Cloud on the Opportunity code provided.

**Test**  
Need to test a specific function, configuration, or customization.

Please ensure to select the correct purpose as this can NOT be updated or changed after this reservation has been created. Review the [Reservation Duration Policy](#) to understand default durations allowed for specific infrastructures based on purpose.

TechZone Certified Base Images  
IBM Cloud LinuxOne/System Z Red Hat VM  
Duration Policy

6. Fill out the reservation form: opportunity ID (if required, see above), description, datacenter based on the geographic location closest to you, and reservation time, OS Image(Choose Red Hat Enterprise Linux 9.4). Once ready, accept the terms and conditions and hit 'Submit' button.

Preferred Region Template  
itz-shared-z - AMERICAS - us-east region - us-east-1 datacenter

Start date and time  
Select a date  
10/07/2025 02:28 PM America/Chicago

End date and time  
Select a date  
10/09/2025 02:28 PM America/Chicago

Reservation policy: Recommended 2 days, but can be reserved up to 2 days on this reservation form. Extend later for 2 days increments up to 4 days total. Max time 6 days total.

OS Image  
Red Hat Enterprise Linux 9.4

Boot Volume Size  
100 GB

VM Profile  
Balanced 2 vCPU, 8 GB RAM, 4 Gbps Bandwidth

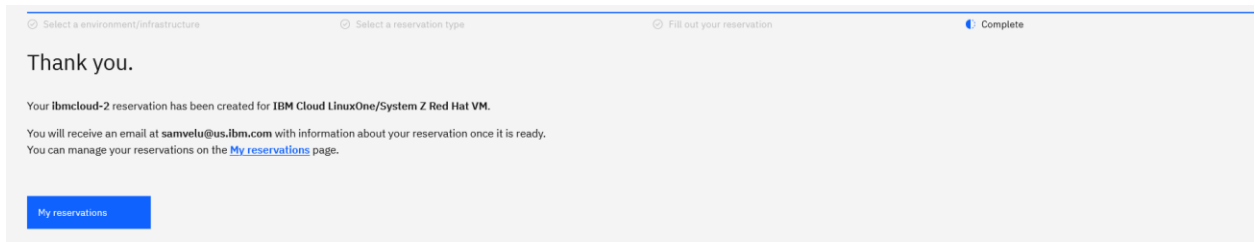
Additional Volume Size  
100 GB

TechZone Certified base images  
IBM Cloud LinuxOne/System Z Red Hat VM  
Duration Policy

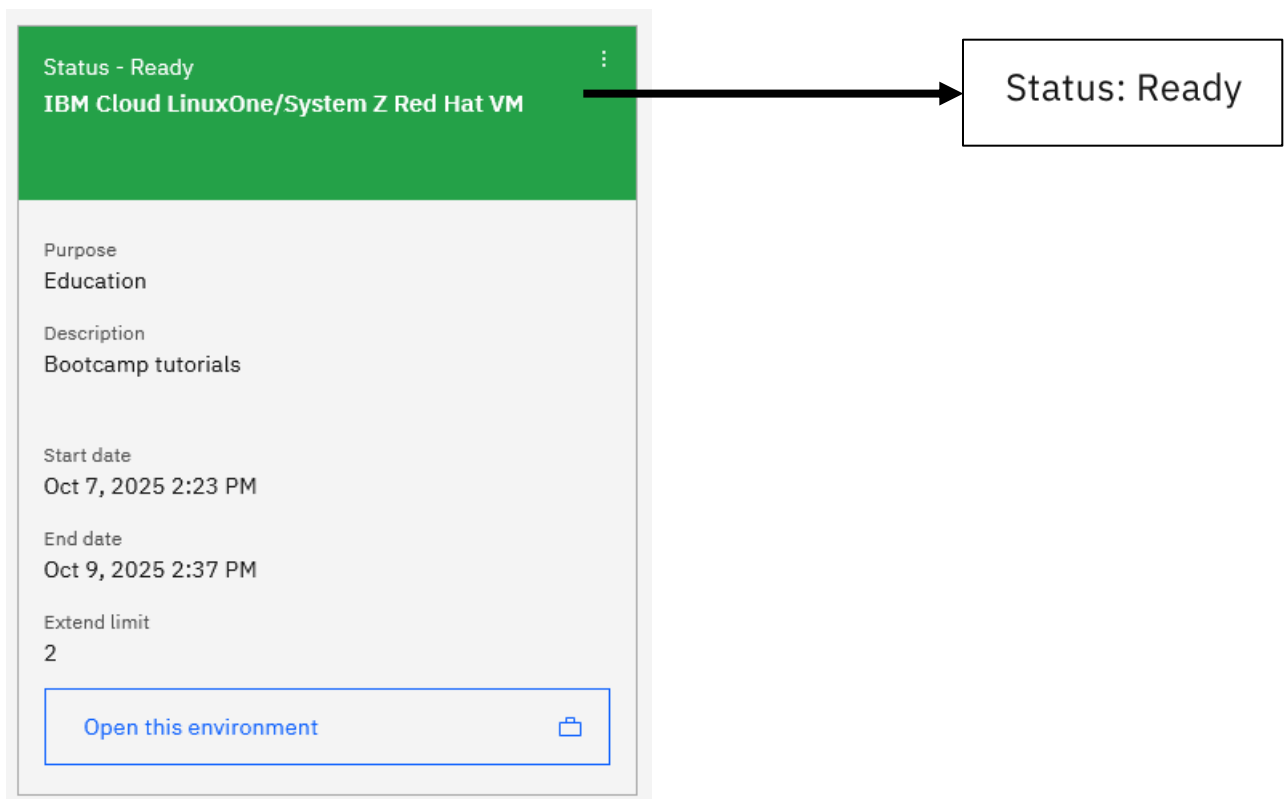
☒ I agree to IBM Technology Zone's [Terms & Conditions](#) and [End User Security Policies](#)

[Submit](#)

7. On the next page, click on 'My Reservations' to see your environment as it is provisioning.

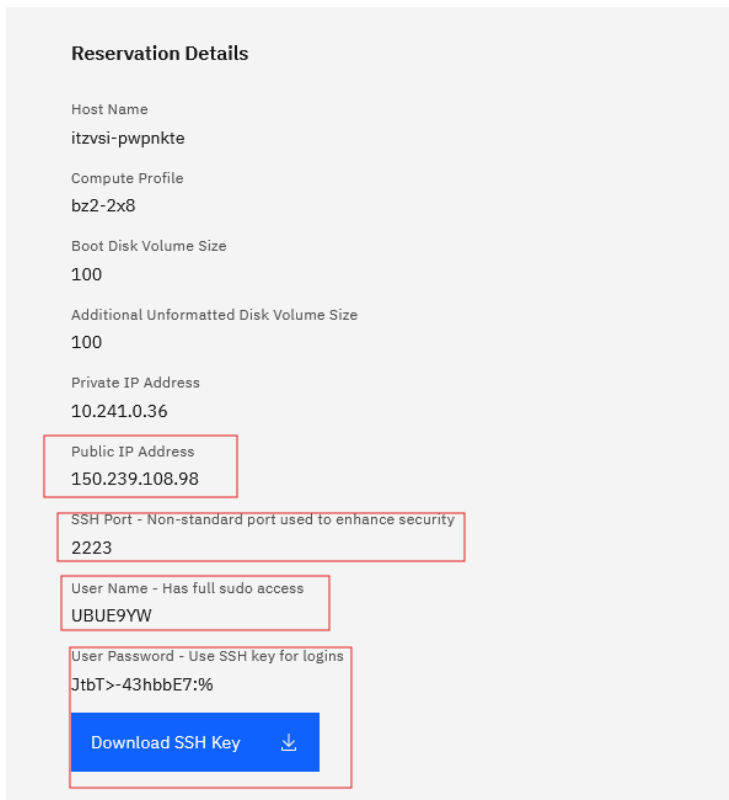


8. Wait for your environment to be 'Ready'. The estimated time for provisioning is between **20 minutes and 90 minutes**. Click on the tile once ready.



Once the environment is 'Ready', click on the tile to see Environment details to view login credentials and other connection details.

Following is a sample Reservation details, note the **ip address, port, userid** and password and the **SSH key** for logon



The screenshot shows a 'Reservation Details' form with the following fields and values:

- Host Name: itzvsj-pwpnkte
- Compute Profile: bz2-2x8
- Boot Disk Volume Size: 100
- Additional Unformatted Disk Volume Size: 100
- Private IP Address: 10.241.0.36
- Public IP Address: 150.239.108.98
- SSH Port - Non-standard port used to enhance security: 2223
- User Name - Has full sudo access: UBUE9YW
- User Password - Use SSH key for logins: JtbT>-43hbbE7:%

A blue button labeled 'Download SSH Key' with a download icon is located below the password field.

You are now ready for the labs!

### Access the provisioned Linux Server

Download the SSH Key, in our case in the windows environment, we downloaded the ssh key as “ssh\_private\_key.pem”

You can connect to the provisioned Linux server from a **Linux or MAC OS terminal** environment with the following command

```
ssh -i [key file name with location] user@host_ipaddress -p 2223
```



```

[samlinux@LAPTOP-FRQP14HT ~]$ ssh -i /tmp/ssh_private_key.pem UBUE9YW@150.239.108.98 -p 2223
-----
Welcome to IBM Technology Zone
-----

IBM's internal systems must only be used for conducting IBM's business
or for purposes authorized by IBM management. Use is subject to audit
at any time by IBM management.

Unauthorized access will be investigated and penalties will be pursued
in conformance with applicable laws and regulations. If you are not an
authorized user disconnect now.

-----
Welcome to IBM Technology Zone
-----

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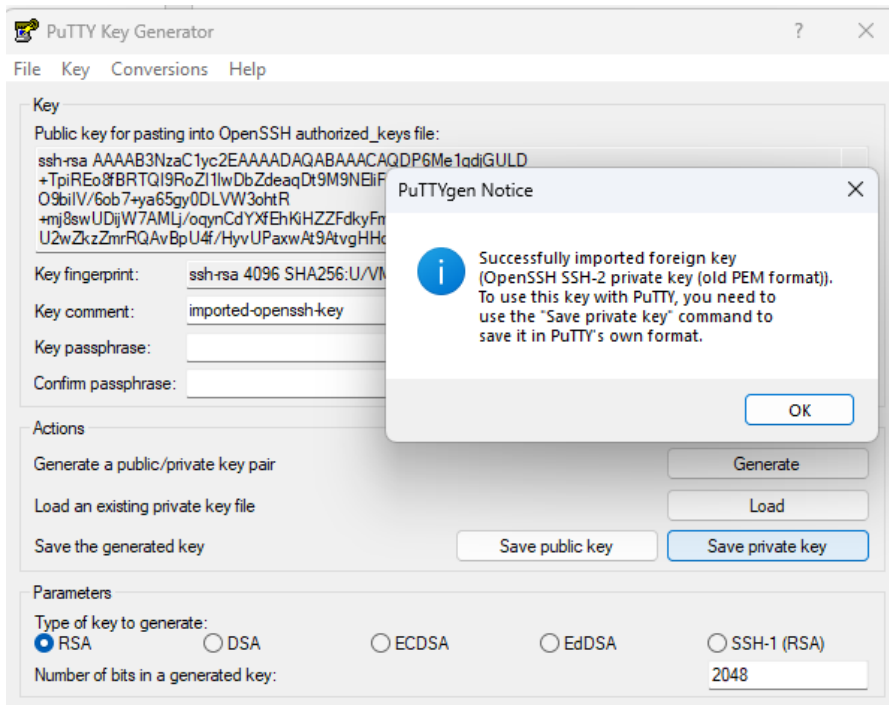
Activate the web console with: systemctl enable --now cockpit.socket

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Wed Oct  8 10:36:03 2025 from 47.188.73.59
[UBUE9YW@itzvsi-pwpmkte ~]$

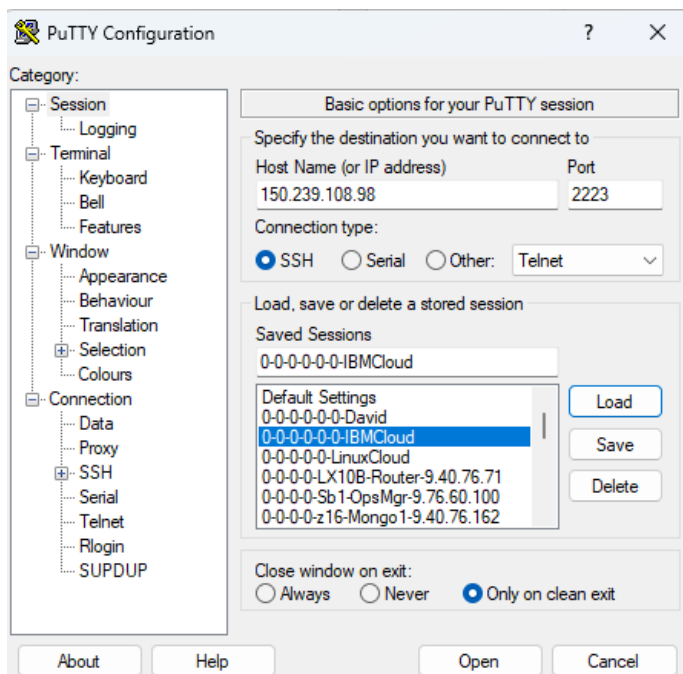
```

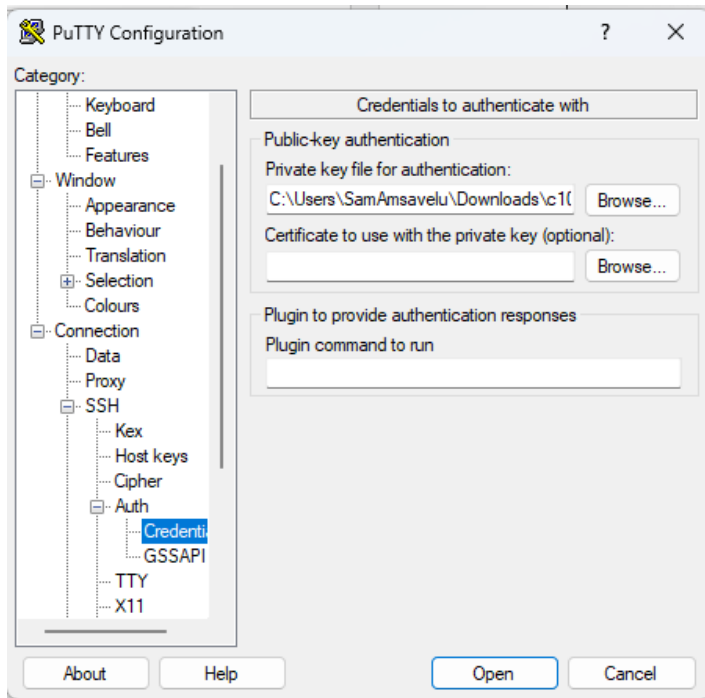
If you are using “**PuTTY**” to connect to your provisioned server, PuTTY requires private keys to be in its proprietary **.ppk** format. To convert the downloaded **.pem** file use **PuTTYgen** utility (a tool included with PuTTY) to convert your **.pem** key to **.ppk** format.

Open PuTTYgen.  
 Click "Load" and select your **.pem** file  
 Click "Save private key" and save it as a **.ppk** file.



Now in PuTTY, Save a session with ip address, portname  
Then navigate to Connection > SSH > Auth > Credentials and browse to select the newly created .ppk file.





```

UBUE9YW@itzvsi-pwpnkte:~
login as: UBUE9YW
Pre-authentication banner message from server:

-----
Welcome to IBM Technology Zone
-----

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or for purposes authorized by IBM management. Use is subject to audit
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in conformance with applicable laws and regulations. If you are not an
authorized user disconnect now.

End of banner message from server
Authenticating with public key "imported-openssh-key"

-----
Welcome to IBM Technology Zone
-----

IBM's internal systems must only be used for conducting IBM's business
or for purposes authorized by IBM management. Use is subject to audit
at any time by IBM management.

Unauthorized access will be investigated and penalties will be pursued
in conformance with applicable laws and regulations. If you are not an
authorized user disconnect now.

Activate the web console with: systemctl enable --now cockpit.socket

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Wed Oct  8 10:37:26 2025 from 47.188.73.59
[UBUE9YW@itzvsi-pwpnkte ~]$

```

Now you are connected to the Linux server

## References

1. “[Red Hat Enterprise Linux](#)” redhat.com (link resides outside IBM)
2. “<https://samveluibm.github.io/MongoDB-Wildfire-Workshop/>” github.com (link resides outside IBM)

## Contact

This hands-on lab guide was created by Sam Amsavelu ([samvelu@us.ibm.com](mailto:samvelu@us.ibm.com)) from the IBM Z Washington Systems Center. Please reach out if you have any questions, comments or concerns.