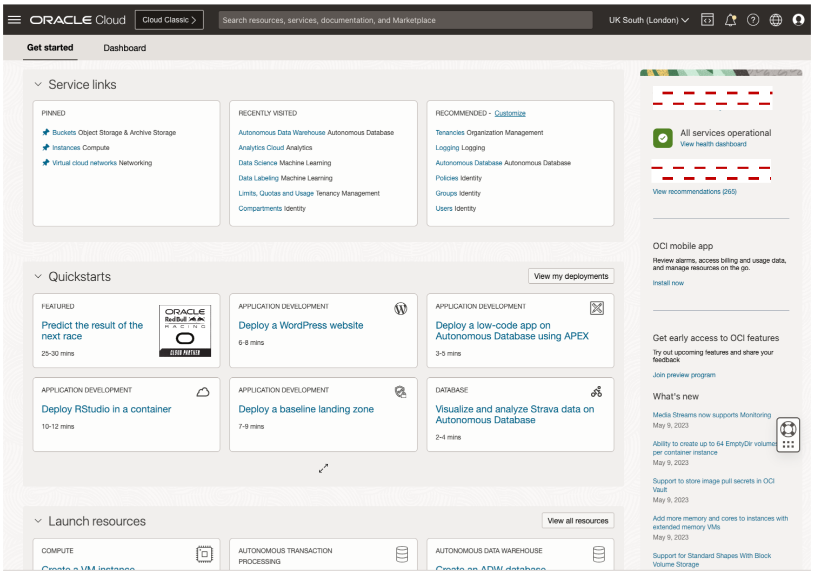
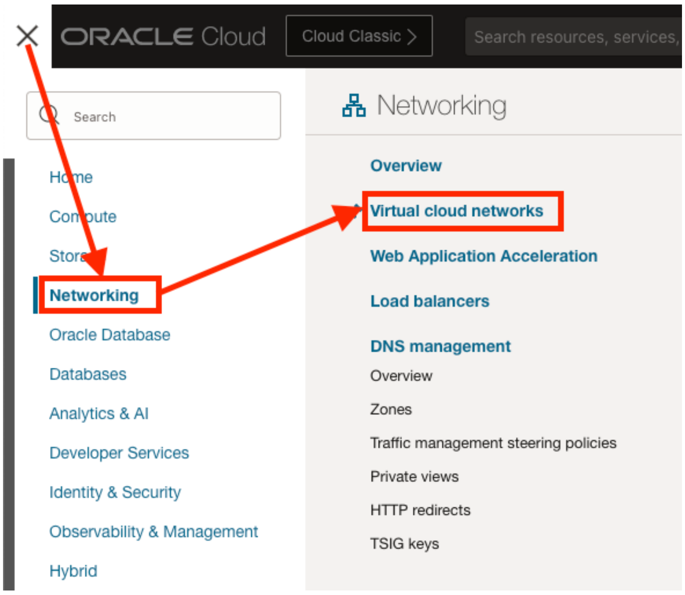
Ismail Syed Senior Data Scientist EMEA Oracle

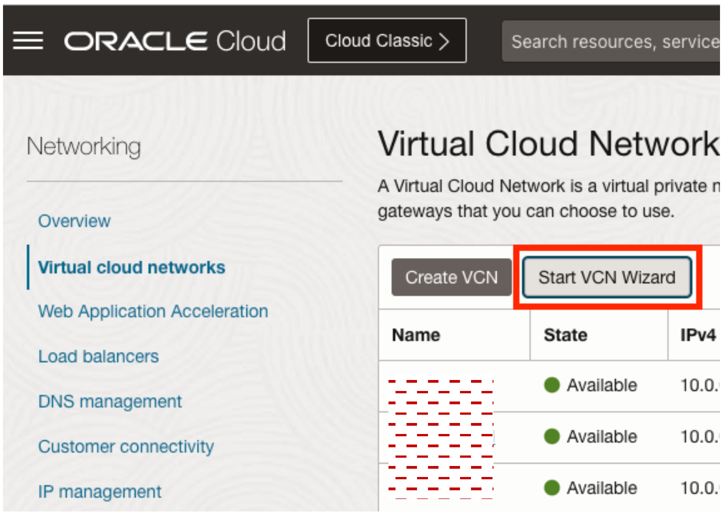
Provisioning OCI AI 'all-in-one' Data Science Image

Description: The purpose of this guide is to provision the ***OCI AI 'all-in-one' Data Science*** Marketplace Image within OCI and set up the Jupyter Server and an Anaconda Environment to execute your Data Science Notebooks.

Step	Screenshots
Login to the OCI Cloud Console at: cloud.oracle.com	 ORACLE Cloud Cloud Classic > Search resources, services, documentation, and Marketplace UK South (London) Get started Dashboard Service links PINNED Buckets Object Storage & Archive Storage Instances Compute Virtual cloud networks Networking RECENTLY VISITED Autonomous Data Warehouse Autonomous Database Analytics Cloud Analytics Data Science Machine Learning Data Labeling Machine Learning Limits, Quotas and Usage Tenancy Management Compartments Identity RECOMMENDED - Customize Tenancies Organization Management Logging Logging Autonomous Database Autonomous Database Policies Identity Groups Identity Users Identity Quickstarts View my deployments FEATURED Predict the result of the next race 25-30 mins ORACLE Red Bull RACING CLOUD PARTNER APPLICATION DEVELOPMENT Deploy a WordPress website 6-8 mins APPLICATION DEVELOPMENT Deploy a low-code app on Autonomous Database using APEX 3-5 mins APPLICATION DEVELOPMENT Deploy RStudio in a container 10-12 mins APPLICATION DEVELOPMENT Deploy a baseline landing zone 7-9 mins DATABASE Visualize and analyze Strava data on Autonomous Database 2-4 mins Launch resources View all resources COMPUTE Create a VM instance AUTONOMOUS TRANSACTION PROCESSING AUTONOMOUS DATA WAREHOUSE Create an ADW database [redacted] All services operational View health dashboard [redacted] View recommendations (265) OCI mobile app Review alarms, access billing and usage data, and manage resources on the go. Install now Get early access to OCI features Try out upcoming features and share your feedback Join preview program What's new Media Streams now supports Monitoring May 9, 2023 Ability to create up to 64 EmptyDir volumes per container instance May 9, 2023 Support to store image pull secrets in OCI Vault May 9, 2023 Add more memory and cores to instances with extended memory VMs May 9, 2023 Support for Standard Shapes With Block Volume Storage
First, we will create a new Network for the Data Science VM to live within. Navigate from the ***OCI Menu > Networking > Virtual Cloud Networks.***	 ORACLE Cloud Cloud Classic > Search resources, services, Search Home Compute Storage Networking Oracle Database Databases Analytics & AI Developer Services Identity & Security Observability & Management Hybrid Networking Overview Virtual cloud networks Web Application Acceleration Load balancers DNS management Overview Zones Traffic management steering policies Private views HTTP redirects TSIG keys

In this tutorial we will create a basic ***Virtual Cloud Network*** with a ***Public Subnet*** with ***Internet Connectivity.***

Click on ***Start VCN Wizard.***



ORACLE Cloud | Cloud Classic > | Search resources, service

Networking

- Overview
- Virtual cloud networks
- Web Application Acceleration
- Load balancers
- DNS management
- Customer connectivity
- IP management

Virtual Cloud Network

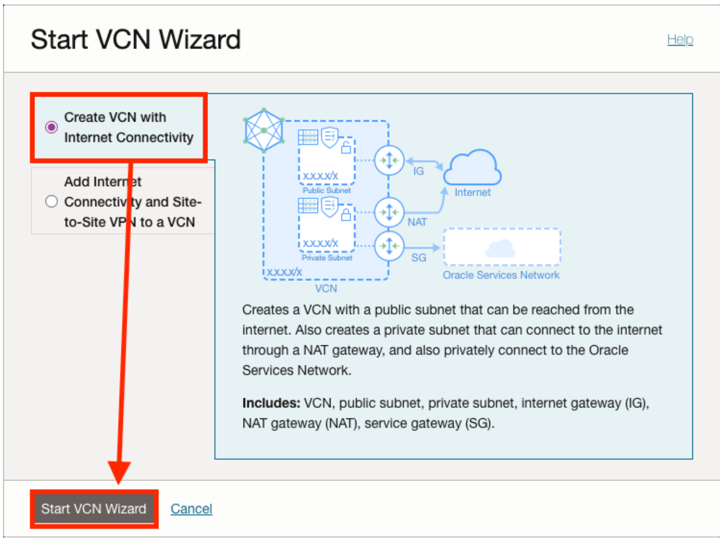
A Virtual Cloud Network is a virtual private n
gateways that you can choose to use.

Create VCN | Start VCN Wizard

Name	State	IPv4
[redacted]	● Available	10.0.
[redacted]	● Available	10.0.
[redacted]	● Available	10.0.

Select ***Create VCN with Internet Connectivity.***

Select ***Start VCN Wizard.***



Start VCN Wizard Help

● Create VCN with Internet Connectivity

○ Add Internet Connectivity and Site-to-Site VPN to a VCN

Creates a VCN with a public subnet that can be reached from the internet. Also creates a private subnet that can connect to the internet through a NAT gateway, and also privately connect to the Oracle Services Network.

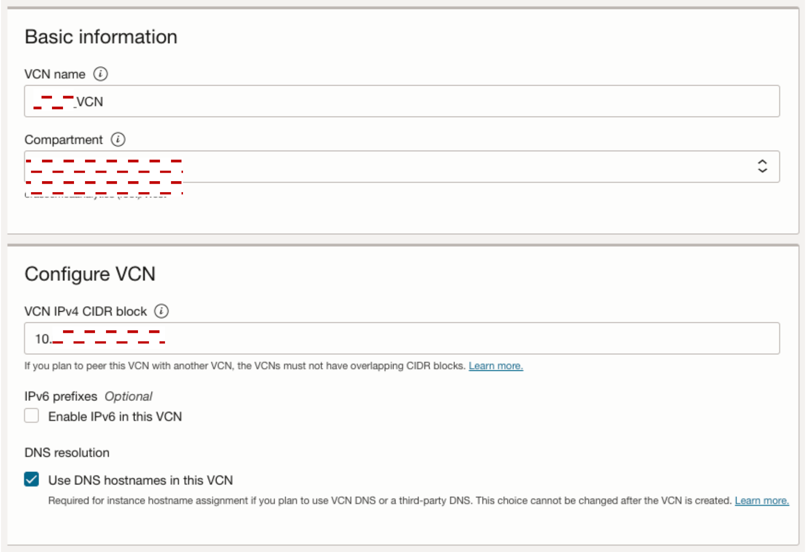
Includes: VCN, public subnet, private subnet, internet gateway (IG), NAT gateway (NAT), service gateway (SG).

Start VCN Wizard Cancel

Enter ***VCN Name.***

Select ***Compartment.***

Select ***VCN CIDR Block Range.***



Basic information

VCN name ⓘ

[redacted]VCN

Compartment ⓘ

[redacted]

Configure VCN

VCN IPv4 CIDR block ⓘ

10.[redacted]

If you plan to peer this VCN with another VCN, the VCNs must not have overlapping CIDR blocks. Learn more.

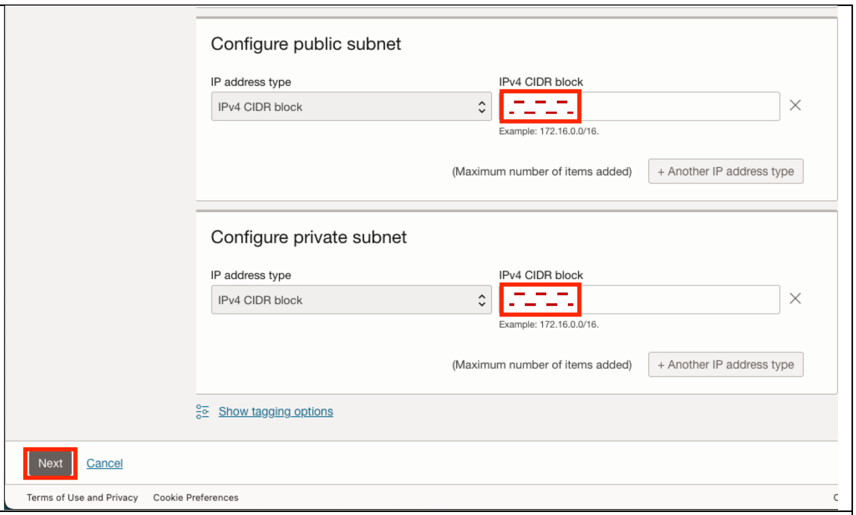
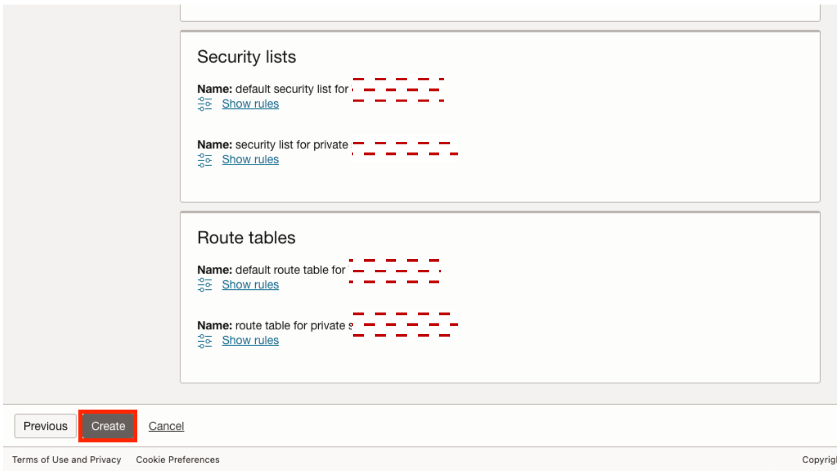
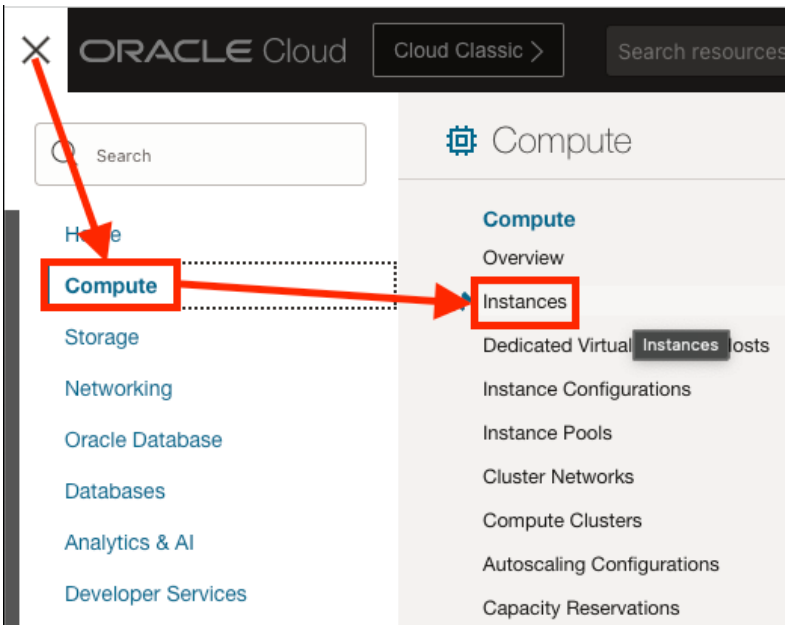
IPv6 prefixes *Optional*

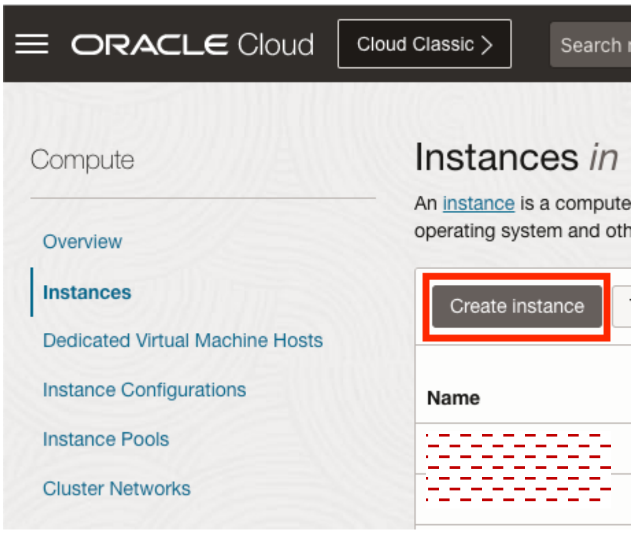
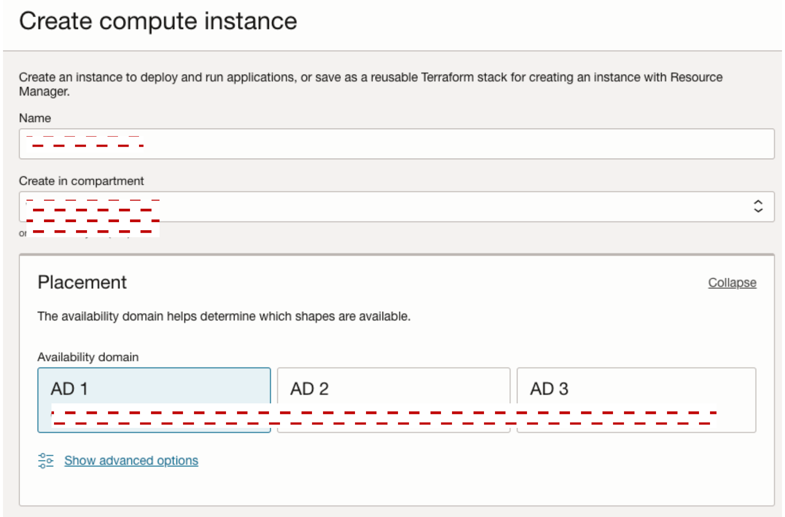
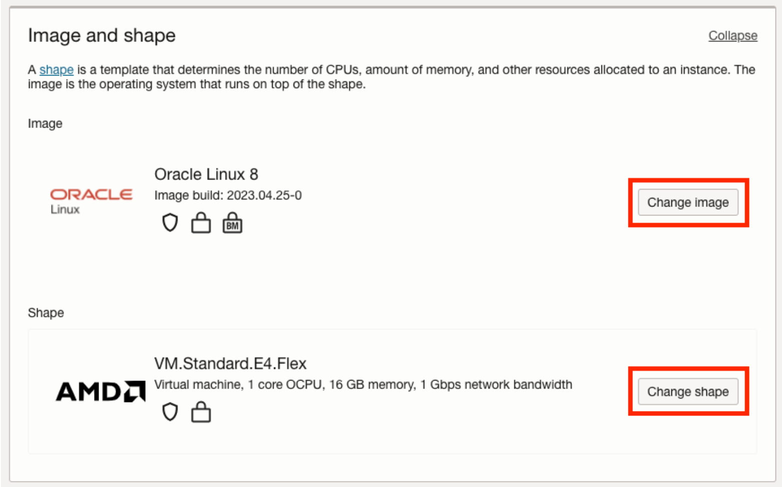
☐ Enable IPv6 in this VCN

DNS resolution

☑ Use DNS hostnames in this VCN

Required for instance hostname assignment if you plan to use VCN DNS or a third-party DNS. This choice cannot be changed after the VCN is created. Learn more.

Enter CIDR Block Ranges for both your ***Public and Private Subnet.*** Click ***Next.***	Configure public subnet IP address type: IPv4 CIDR block IPv4 CIDR block: [redacted] Example: 172.16.0.0/16. (Maximum number of items added) Configure private subnet IP address type: IPv4 CIDR block IPv4 CIDR block: [redacted] Example: 172.16.0.0/16. (Maximum number of items added) + Another IP address type Show tagging options Next Cancel Terms of Use and Privacy Cookie Preferences
Review the remaining default options. By default, you'll be able to SSH into the Public Network. Click ***Create.*** This will take a minute to Create.	Security lists **Name:** default security list for [redacted] **Name:** security list for private [redacted] Route tables **Name:** default route table for [redacted] **Name:** route table for private [redacted] Show rules Previous Create Cancel Terms of Use and Privacy Cookie Preferences Copyrigl
Once your VCN is created, we will provision our VM Image inside the Public Network. From the ***OCI Menu > Compute > Instances.***	 ORACLE Cloud Cloud Classic > Search resources Search Home Compute Storage Networking Oracle Database Databases Analytics & AI Developer Services Compute Compute Overview Instances Dedicated Virtual Machine Hosts Instances Instance Configurations Instance Pools Cluster Networks Compute Clusters Autoscaling Configurations Capacity Reservations

Click on ***Create Instance.***	 ORACLE Cloud Cloud Classic > Search Compute Overview Instances Dedicated Virtual Machine Hosts Instance Configurations Instance Pools Cluster Networks Instances in An instance is a compute operating system and oth Create instance Name [redacted]
Enter ***Name.*** Select ***Compartment.*** Choose ***Availability Domain.***	 Create compute instance Create an instance to deploy and run applications, or save as a reusable Terraform stack for creating an instance with Resource Manager. Name: [redacted] Create in compartment: [redacted] Placement — Collapse The availability domain helps determine which shapes are available. Availability domain: AD 1 / AD 2 / AD 3 [redacted] Show advanced options
We will change both the Image and Shape. First the Image, ***Click on Change Image.***	 Image and shape — Collapse A shape is a template that determines the number of CPUs, amount of memory, and other resources allocated to an instance. The image is the operating system that runs on top of the shape. Image ORACLE Linux Oracle Linux 8 Image build: 2023.04.25-0 Change image Shape AMD VM.Standard.E4.Flex Virtual machine, 1 core OCPU, 16 GB memory, 1 Gbps network bandwidth Change shape

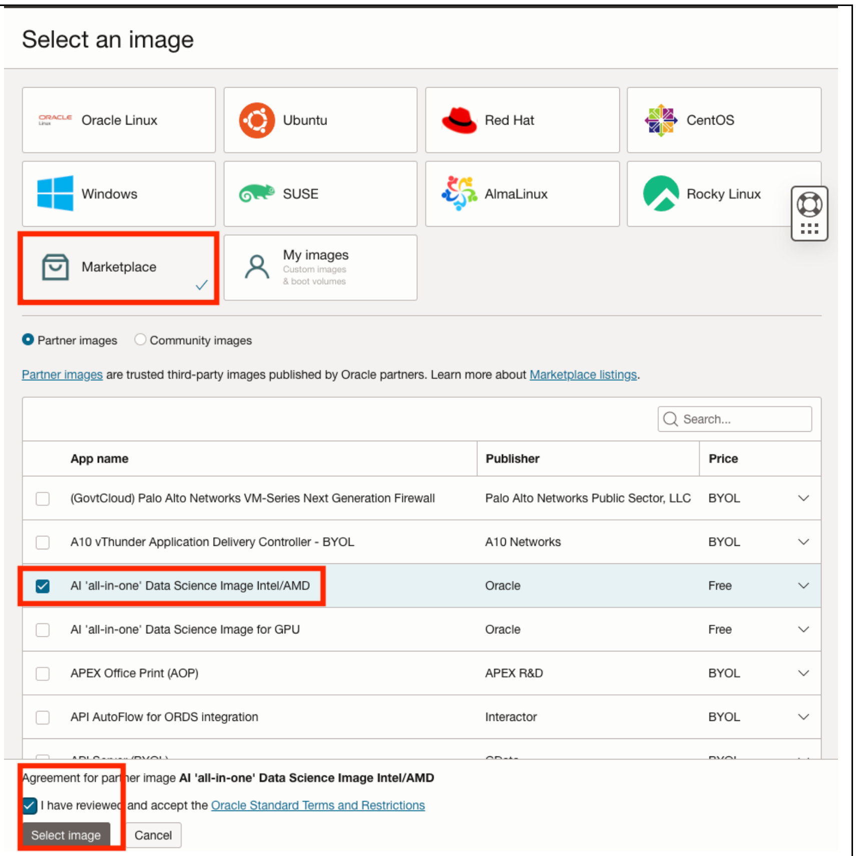
Select ***Marketplace.***

Select ***AI 'all-in-one' Data Science Image Intel/AMD.***

You can select the GPU version if deploying to GPUs.

Read and Accept the Terms and Restrictions.

Click ***Select Image.***



● Partner images ○ Community images

Partner images are trusted third-party images published by Oracle partners. Learn more about Marketplace listings.

	App name	Publisher	Price
□	(GovtCloud) Palo Alto Networks VM-Series Next Generation Firewall	Palo Alto Networks Public Sector, LLC	BYOL
□	A10 vThunder Application Delivery Controller - BYOL	A10 Networks	BYOL
☑	AI 'all-in-one' Data Science Image Intel/AMD	Oracle	Free
□	AI 'all-in-one' Data Science Image for GPU	Oracle	Free
□	APEX Office Print (AOP)	APEX R&D	BYOL
□	API AutoFlow for ORDS integration	Interactor	BYOL
□	API Server (BYOL)	CData	BYOL

Agreement for partner image **AI 'all-in-one' Data Science Image Intel/AMD**

☑ I have reviewed and accept the Oracle Standard Terms and Restrictions

Then we will change the Shape.

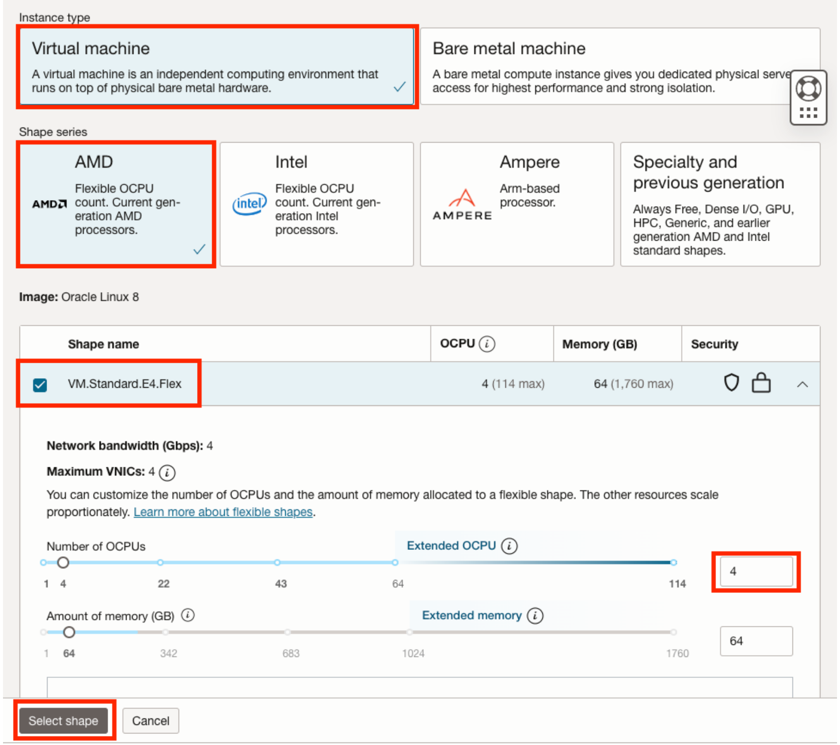
Select ***Virtual Machine.***

Select ***AMD.***

Select Shape Name as ***VM.Standard.E4.Flex***

Select OCPU as ***4.***

Click ***Select Shape.***


Instance type

Virtual machine ✓ A virtual machine is an independent computing environment that runs on top of physical bare metal hardware.

Bare metal machine A bare metal compute instance gives you dedicated physical serve access for highest performance and strong isolation.

Shape series

- **AMD** ✓ Flexible OCPU count. Current generation AMD processors.
- **Intel** Flexible OCPU count. Current generation Intel processors.
- **Ampere** Arm-based processor.
- **Specialty and previous generation** Always Free, Dense I/O, GPU, HPC, Generic, and earlier generation AMD and Intel standard shapes.

Image: Oracle Linux 8

	Shape name	OCPU	Memory (GB)	Security
☑	VM.Standard.E4.Flex	4 (114 max)	64 (1,760 max)	

Network bandwidth (Gbps): 4

Maximum VNICs: 4

You can customize the number of OCPUs and the amount of memory allocated to a flexible shape. The other resources scale proportionately. Learn more about flexible shapes.

Number of OCPUs: 4

Amount of memory (GB): 64

Now time to define the Network we created earlier.

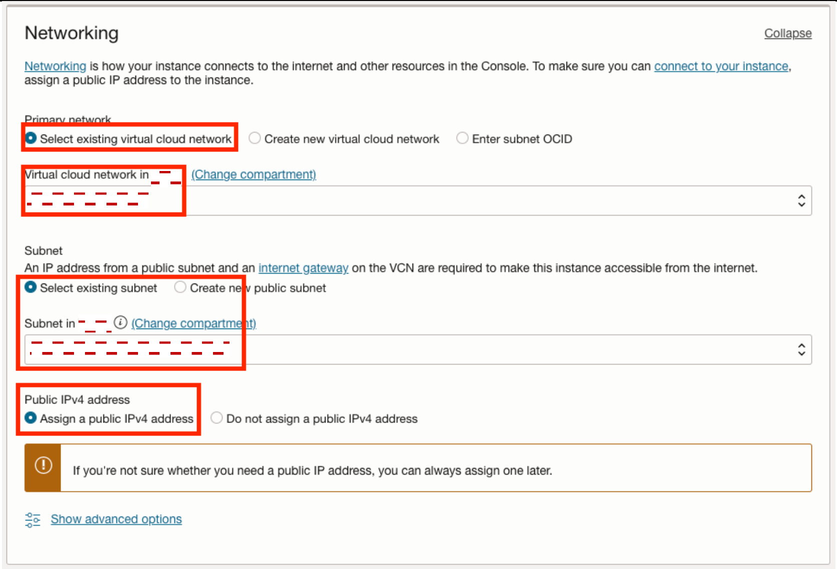
Choose ***Select existing virtual cloud network.***

Select the ***VCN we created earlier.***

Choose ***Select existing subnet.***

Select the ***Public Subnet we created earlier.***

Select ***Assign a public IPv4 address.***



Networking

Collapse

Networking is how your instance connects to the internet and other resources in the Console. To make sure you can connect to your instance, assign a public IP address to the instance.

Primary network

● Select existing virtual cloud network ○ Create new virtual cloud network ○ Enter subnet OCID

Virtual cloud network in [redacted] (Change compartment)

[redacted]

Subnet

An IP address from a public subnet and an internet gateway on the VCN are required to make this instance accessible from the internet.

● Select existing subnet ○ Create new public subnet

Subnet in [redacted] (Change compartment)

[redacted]

Public IPv4 address

● Assign a public IPv4 address ○ Do not assign a public IPv4 address

If you're not sure whether you need a public IP address, you can always assign one later.

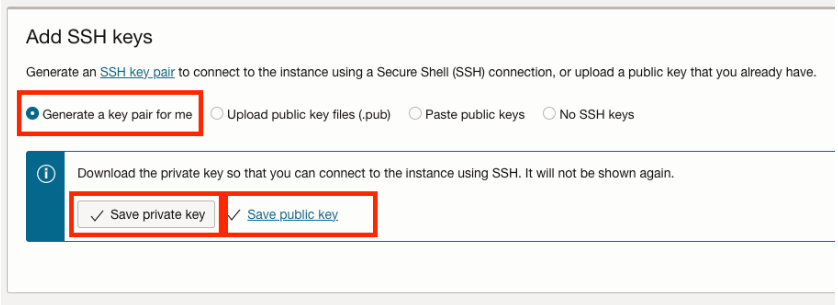
Show advanced options

We will then generate a public/private key pair.

Select ***Generate a key pair for me.***

Click ***Save private key.***

Click ***Save public key.***



Add SSH keys

Generate an SSH key pair to connect to the instance using a Secure Shell (SSH) connection, or upload a public key that you already have.

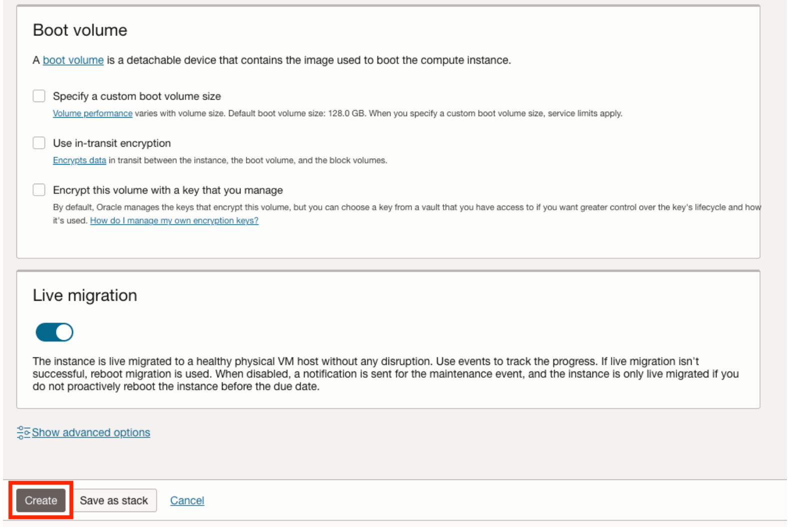
● Generate a key pair for me ○ Upload public key files (.pub) ○ Paste public keys ○ No SSH keys

Download the private key so that you can connect to the instance using SSH. It will not be shown again.

✓ Save private key ✓ Save public key

Leave all the other options as default.

Click ***Create.***



Boot volume

A boot volume is a detachable device that contains the image used to boot the compute instance.

□ Specify a custom boot volume size
Volume performance varies with volume size. Default boot volume size: 128.0 GB. When you specify a custom boot volume size, service limits apply.

□ Use in-transit encryption
Encrypts data in transit between the instance, the boot volume, and the block volumes.

□ Encrypt this volume with a key that you manage
By default, Oracle manages the keys that encrypt this volume, but you can choose a key from a vault that you have access to if you want greater control over the key's lifecycle and how it's used. How do I manage my own encryption keys?

Live migration

The instance is live migrated to a healthy physical VM host without any disruption. Use events to track the progress. If live migration isn't successful, reboot migration is used. When disabled, a notification is sent for the maintenance event, and the instance is only live migrated if you do not proactively reboot the instance before the due date.

Show advanced options

This will take a few minutes to provision.

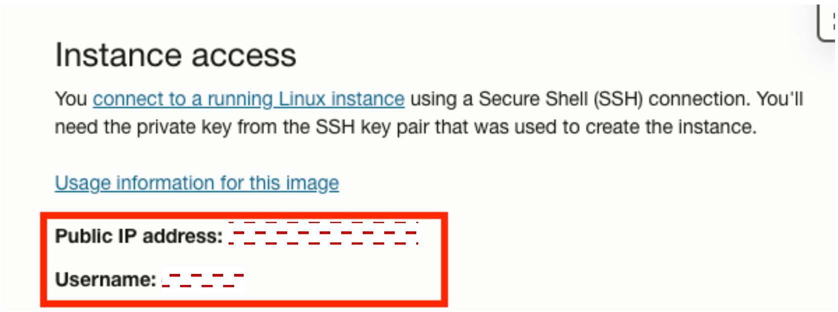
While it is provisioning, make note of a few of the details being displayed.

Public IP Address

Username

You can also open up the usage instructions using the link above the Public IP Address - https://cloud.oracle.com/marketplace/application/134110504/usageInformation?region=eu-frankfurt-1

I will be referencing this when continuing.



Instance access

You connect to a running Linux instance using a Secure Shell (SSH) connection. You'll need the private key from the SSH key pair that was used to create the instance.

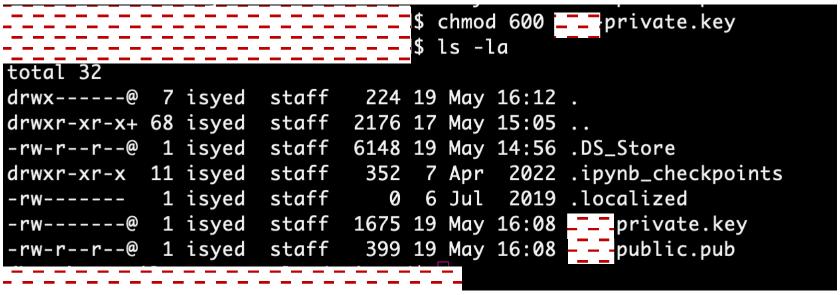
Usage information for this image

Public IP address: [redacted]

Username: [redacted]

While the provisioning is taking place, I have opened a Terminal on my laptop and renamed and updated the private key permissions to 600.

chmod 600 <private-key-file>



```
[redacted]$ chmod 600 [redacted]private.key
$ ls -la
total 32
drwx------@  7 isyed  staff   224 19 May 16:12 .
drwxr-xr-x+ 68 isyed  staff  2176 17 May 15:05 ..
-rw-r--r--@  1 isyed  staff  6148 19 May 14:56 .DS_Store
drwxr-xr-x  11 isyed  staff   352  7 Apr  2022 .ipynb_checkpoints
-rw-------   1 isyed  staff     0  6 Jul  2019 .localized
-rw-------@  1 isyed  staff  1675 19 May 16:08 [redacted]private.key
-rw-r--r--@  1 isyed  staff   399 19 May 16:08 [redacted]public.pub
[redacted]
```

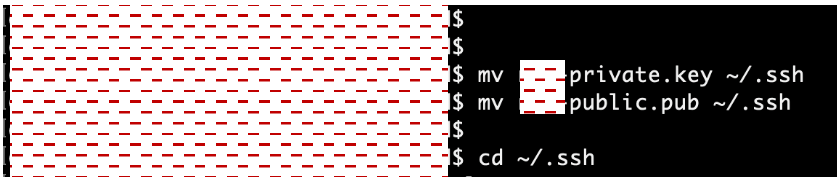
If using a Mac, I would recommend moving your keys to the ***~/.ssh*** folder where all keys are stored.

mv <private-key-file> ~/.ssh

mv <public-key-file> ~/.ssh

Navigate to your .ssh directory.

cd ~/.ssh

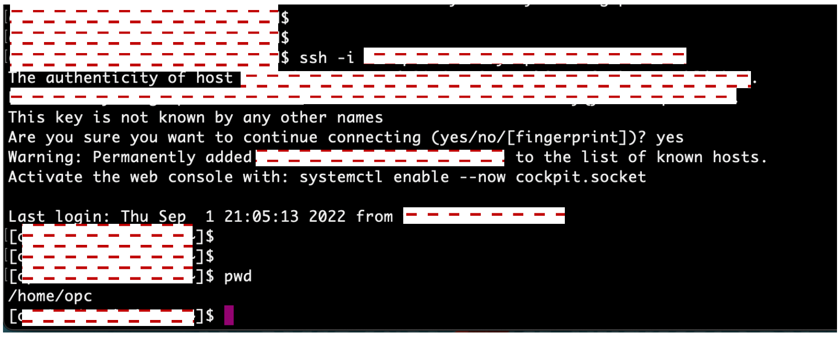


```
[redacted]$
[redacted]$
[redacted]$ mv [redacted]private.key ~/.ssh
[redacted]$ mv [redacted]public.pub ~/.ssh
[redacted]$
[redacted]$ cd ~/.ssh
```

We will now test connecting into the VM.

Let's SSH into the VM.

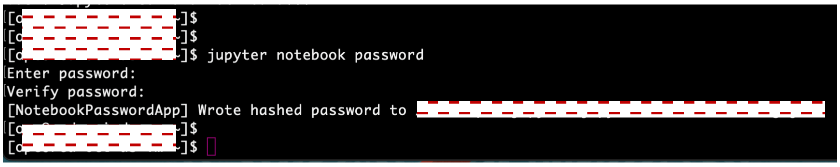
ssh -i <private-key> <user>@<public-ip>



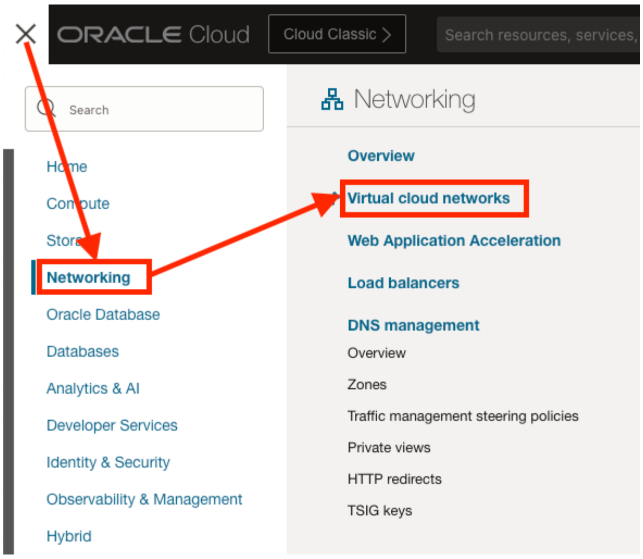
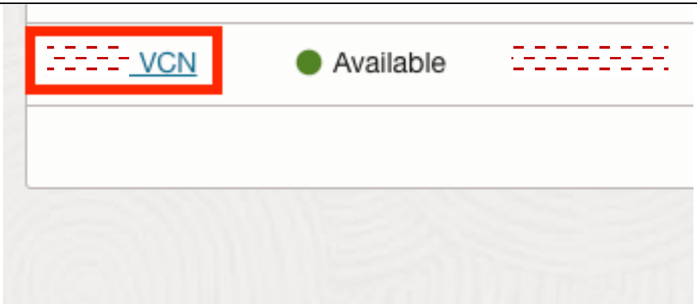
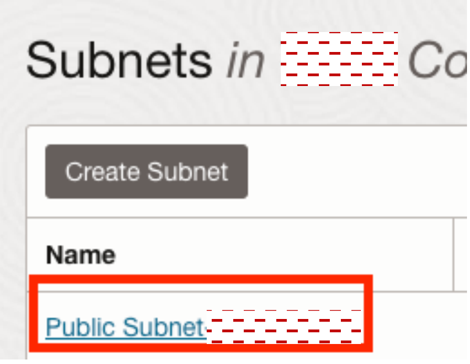
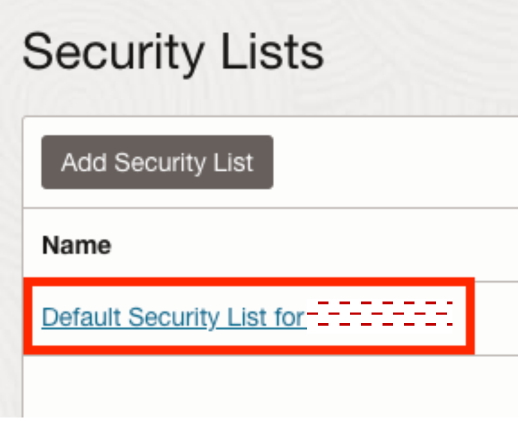
```
[redacted]$
[redacted]$
[redacted]$ ssh -i [redacted]
The authenticity of host [redacted].
[redacted]
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added [redacted] to the list of known hosts.
Activate the web console with: systemctl enable --now cockpit.socket

Last login: Thu Sep  1 21:05:13 2022 from [redacted]
[[redacted]]$
[[redacted]]$
[[redacted]]$ pwd
/home/opc
[[redacted]]$
```

We will reset the Jupyter Notebook Password.

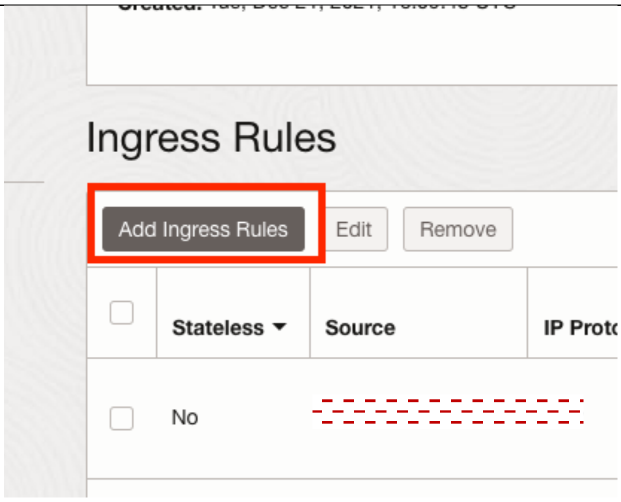
jupyter notebook password



```
[[redacted]]$
[[redacted]]$
[[redacted]]$ jupyter notebook password
Enter password:
Verify password:
[NotebookPasswordApp] Wrote hashed password to [redacted]
[[redacted]]$
[[redacted]]$
```

Now before connecting into the Jupyter Notebook, we will need to open ***port 8888*** on ***our Subnet Security List.*** Navigate back to the OCI Console, ***OCI Menu > Networking > Virtual Cloud Network.***	 ORACLE Cloud Cloud Classic > Search resources, services, Search Home Compute Storage Networking Oracle Database Databases Analytics & AI Developer Services Identity & Security Observability & Management Hybrid Networking Overview Virtual cloud networks Web Application Acceleration Load balancers DNS management Overview Zones Traffic management steering policies Private views HTTP redirects TSIG keys
Select our ***VCN.***	
Select our ***Public Network.***	 Subnets *in* [redacted] *Co* Create Subnet Name Public Subnet-[redacted]
Select our ***Security List.***	 Security Lists Add Security List Name Default Security List for [redacted]

Click ***Add Ingress Rule.***



Ingress Rules

	Stateless	Source	IP Proto
□	No	[redacted]	

Add Source Type – ***CIDR***

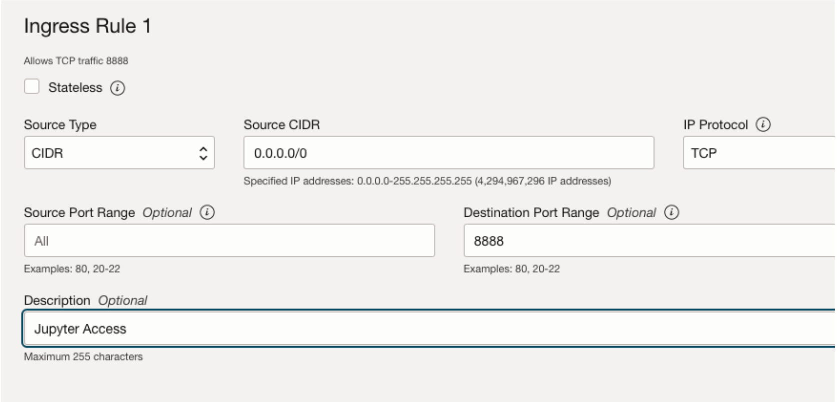
Source CIDR – ***0.0.0.0/0*** (***access from anywhere, you can adjust as needed.)***

IP Protocol – ***TCP***

Destination Range – ***8888***

Click ***Add Ingress Rule.***

This will allow us to connect to Port 8888 on the VM.



Ingress Rule 1

Allows TCP traffic 8888

□ Stateless ⓘ

Source Type: CIDR

Source CIDR: 0.0.0.0/0

Specified IP addresses: 0.0.0.0-255.255.255.255 (4,294,967,296 IP addresses)

IP Protocol ⓘ: TCP

Source Port Range *Optional* ⓘ: All

Examples: 80, 20-22

Destination Port Range *Optional* ⓘ: 8888

Examples: 80, 20-22

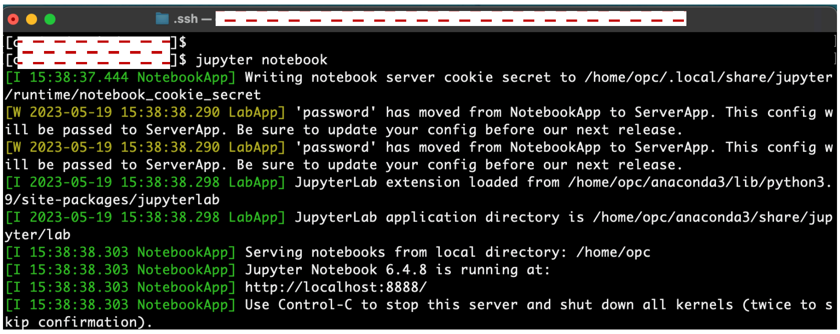
Description *Optional*: Jupyter Access

Maximum 255 characters

We can now test creating an SSH Tunnel into the VM and access Jupyter Lab from our Local Browser.

In your Terminal which is SSH'd into the VM, start the Jupyter Notebook Server.

jupyter notebook



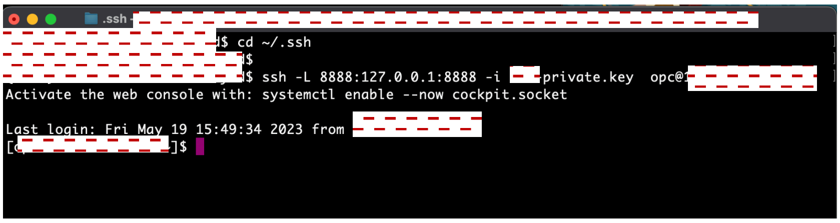
```
[c[redacted]]$
[c[redacted]]$ jupyter notebook
[I 15:38:37.444 NotebookApp] Writing notebook server cookie secret to /home/opc/.local/share/jupyter
/runtime/notebook_cookie_secret
[W 2023-05-19 15:38:38.290 LabApp] 'password' has moved from NotebookApp to ServerApp. This config w
ill be passed to ServerApp. Be sure to update your config before our next release.
[W 2023-05-19 15:38:38.290 LabApp] 'password' has moved from NotebookApp to ServerApp. This config w
ill be passed to ServerApp. Be sure to update your config before our next release.
[I 2023-05-19 15:38:38.298 LabApp] JupyterLab extension loaded from /home/opc/anaconda3/lib/python3.
9/site-packages/jupyterlab
[I 2023-05-19 15:38:38.298 LabApp] JupyterLab application directory is /home/opc/anaconda3/share/jup
yter/lab
[I 15:38:38.303 NotebookApp] Serving notebooks from local directory: /home/opc
[I 15:38:38.303 NotebookApp] Jupyter Notebook 6.4.8 is running at:
[I 15:38:38.303 NotebookApp] http://localhost:8888/
[I 15:38:38.303 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to s
kip confirmation).
```

In another Terminal window navigate to the ***~/.ssh*** directory.

cd ~./ssh

Open up an SSH Tunnel to map the VM Host and Jupyter Port to the local host.

ssh -L 8888:127.0.0.1:8888 -i <vm-private-key-file> opc@<vm-ip-address>



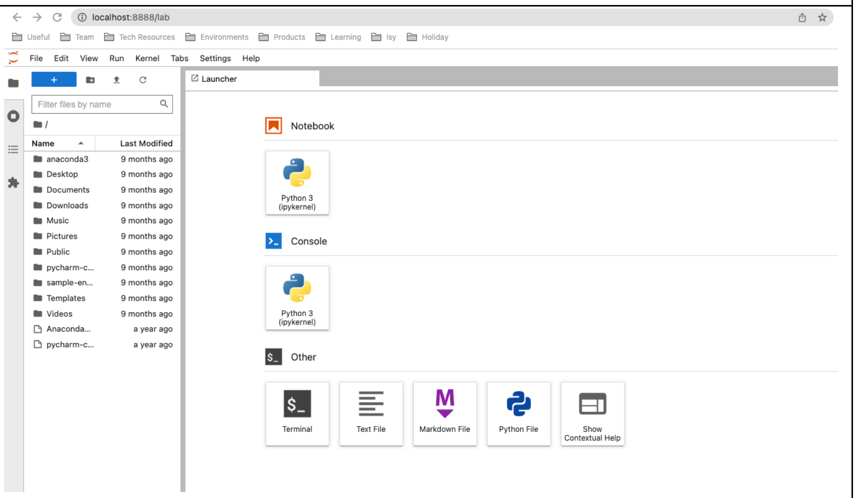
```
[redacted]$ cd ~/.ssh
[redacted]$
[redacted]$ ssh -L 8888:127.0.0.1:8888 -i [redacted]private.key  opc@[redacted]
Activate the web console with: systemctl enable --now cockpit.socket

Last login: Fri May 19 15:49:34 2023 from [redacted]
[[redacted]]$
```

Within a local browser visit the webpage:

[***http://localhost:8888/lab***](http://localhost:8888/lab)

When prompted with a password, enter the new password we created earlier.

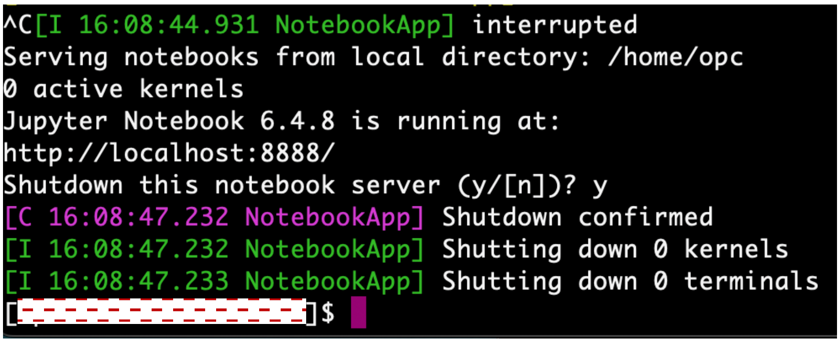
We are now into the Jupyter Environment.



Name	Last Modified
anaconda3	9 months ago
Desktop	9 months ago
Documents	9 months ago
Downloads	9 months ago
Music	9 months ago
Pictures	9 months ago
Public	9 months ago
pycharm-c...	9 months ago
sample-en...	9 months ago
Templates	9 months ago
Videos	9 months ago
Anaconda...	a year ago
pycharm-c...	a year ago

Once we can login, lets close down the Notebook Server (for now) within the SSH Session you have open.

Ctrl-C.



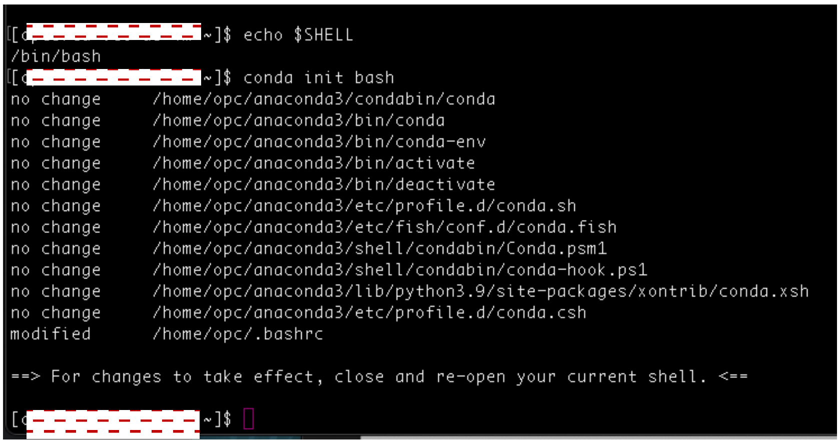
```
^C[I 16:08:44.931 NotebookApp] interrupted
Serving notebooks from local directory: /home/opc
0 active kernels
Jupyter Notebook 6.4.8 is running at:
http://localhost:8888/
Shutdown this notebook server (y/[n])? y
[C 16:08:47.232 NotebookApp] Shutdown confirmed
[I 16:08:47.232 NotebookApp] Shutting down 0 kernels
[I 16:08:47.233 NotebookApp] Shutting down 0 terminals
[[redacted]]$
```

We will now ***create*** a ***custom Conda Environment*** to use within the Jupyter Notebook.

First, we must initialise the terminal for conda.

conda init bash

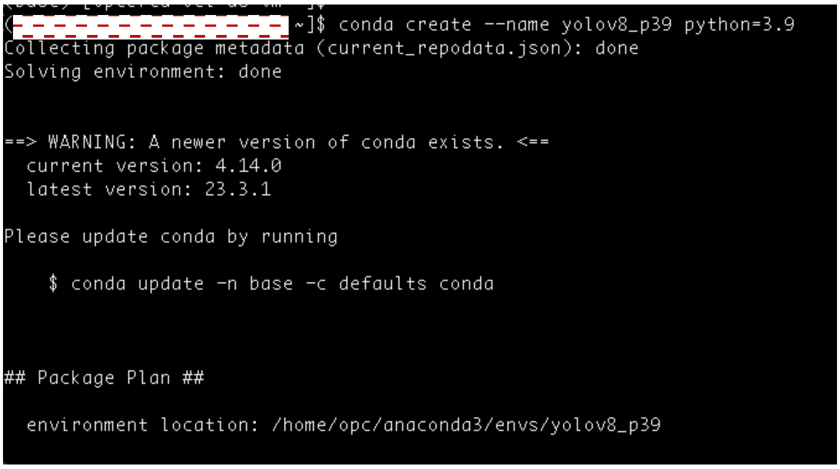
Once this is done, we will have to ***logout and log back into the VM via SSH.***



```
[[redacted]~]$ echo $SHELL
/bin/bash
[[redacted]~]$ conda init bash
no change     /home/opc/anaconda3/condabin/conda
no change     /home/opc/anaconda3/bin/conda
no change     /home/opc/anaconda3/bin/conda-env
no change     /home/opc/anaconda3/bin/activate
no change     /home/opc/anaconda3/bin/deactivate
no change     /home/opc/anaconda3/etc/profile.d/conda.sh
no change     /home/opc/anaconda3/etc/fish/conf.d/conda.fish
no change     /home/opc/anaconda3/shell/condabin/Conda.psm1
no change     /home/opc/anaconda3/shell/condabin/conda-hook.ps1
no change     /home/opc/anaconda3/lib/python3.9/site-packages/xontrib/conda.xsh
no change     /home/opc/anaconda3/etc/profile.d/conda.csh
modified      /home/opc/.bashrc

==> For changes to take effect, close and re-open your current shell. <==

[[redacted]~]$
```

Once logged back in we can ***create a new python 3.9 environment.***

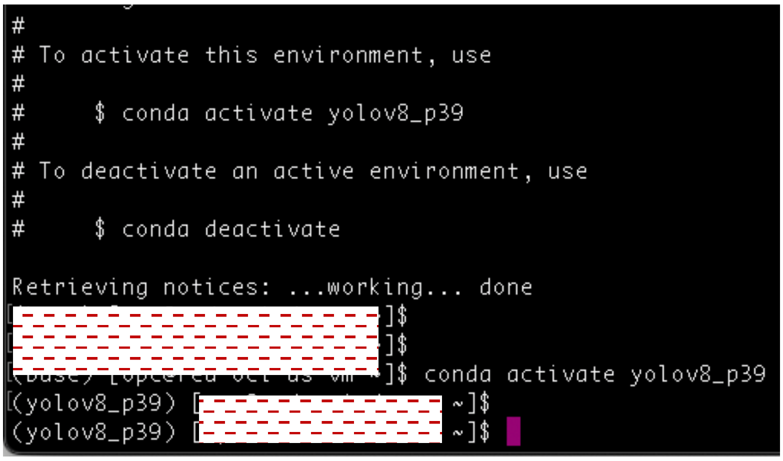
conda create --name yolov8_p39 python=3.9



```
([redacted]~]$ conda create --name yolov8_p39 python=3.9
Collecting package metadata (current_repodata.json): done
Solving environment: done


==> WARNING: A newer version of conda exists. <==
  current version: 4.14.0
  latest version: 23.3.1

Please update conda by running

    $ conda update -n base -c defaults conda



## Package Plan ##

  environment location: /home/opc/anaconda3/envs/yolov8_p39
```

Once created, lets activate the conda.

conda activate yolov8_p39

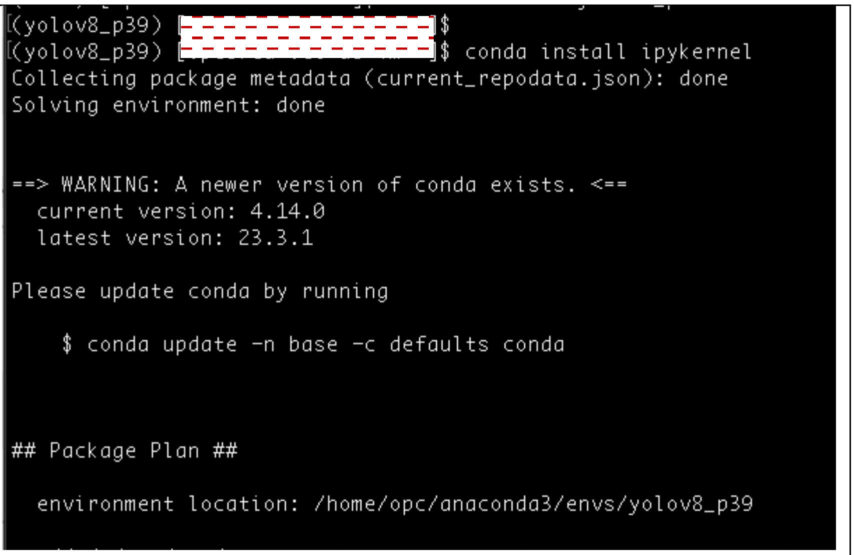


```
#
# To activate this environment, use
#
#     $ conda activate yolov8_p39
#
# To deactivate an active environment, use
#
#     $ conda deactivate

Retrieving notices: ...working... done
[redacted]]$ conda activate yolov8_p39
(yolov8_p39) [[redacted]~]$
(yolov8_p39) [[redacted]~]$
```

We will now install two libraries to enable use within Jupyter Lab,

conda install ipykernel

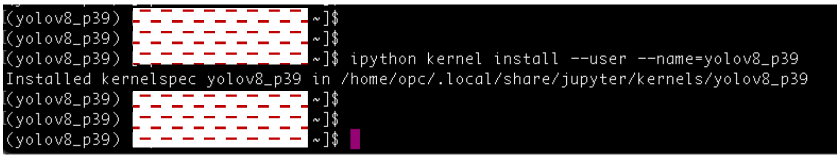
conda install nb_conda_kernels



```
(yolov8_p39) [redacted]$
(yolov8_p39) [redacted]$ conda install ipykernel
Collecting package metadata (current_repodata.json): done
Solving environment: done


==> WARNING: A newer version of conda exists. <==
  current version: 4.14.0
  latest version: 23.3.1

Please update conda by running

    $ conda update -n base -c defaults conda


## Package Plan ##

  environment location: /home/opc/anaconda3/envs/yolov8_p39
```

Once done we will now register the conda environment for use within the Jupyter Lab Environment.

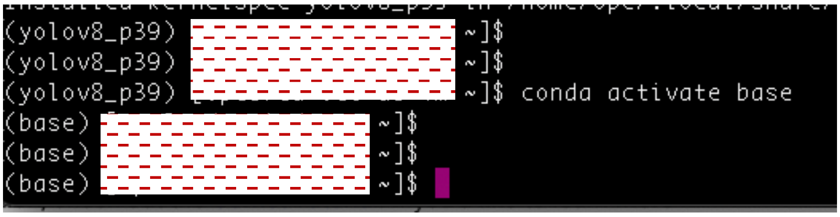
ipython kernel install --user --name=yolov8_p39



```
(yolov8_p39) [redacted] ~]$
(yolov8_p39) [redacted] ~]$
(yolov8_p39) [redacted] ~]$ ipython kernel install --user --name=yolov8_p39
Installed kernelspec yolov8_p39 in /home/opc/.local/share/jupyter/kernels/yolov8_p39
(yolov8_p39) [redacted] ~]$
(yolov8_p39) [redacted] ~]$
(yolov8_p39) [redacted] ~]$
```

Switch back to the base conda environment.

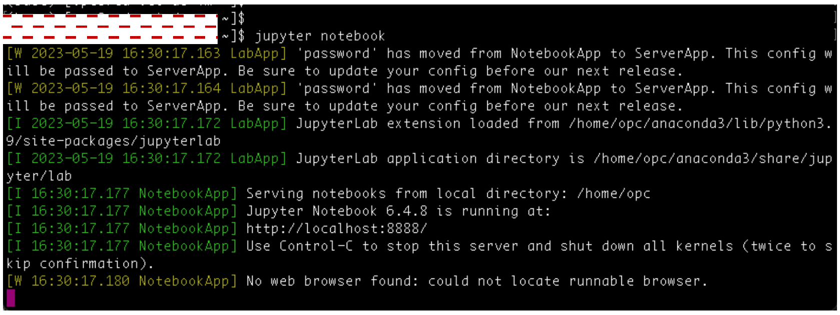
conda activate base



```
(yolov8_p39) [redacted] ~]$
(yolov8_p39) [redacted] ~]$
(yolov8_p39) [redacted] ~]$ conda activate base
(base) [redacted] ~]$
(base) [redacted] ~]$
(base) [redacted] ~]$
```

Now let's start the Jupyter Notebook Session back up.

jupyter notebook

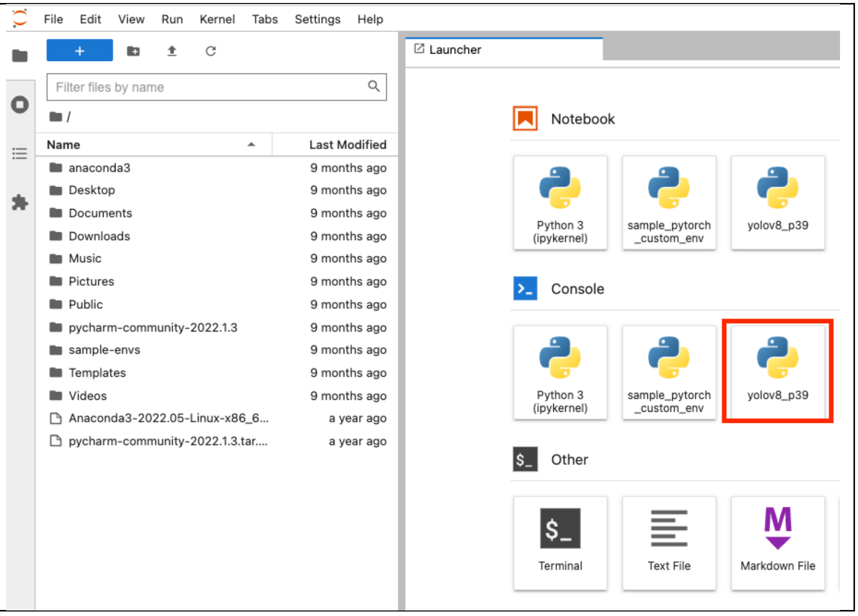


```
[redacted] ~]$
[redacted] ~]$ jupyter notebook
[W 2023-05-19 16:30:17.163 LabApp] 'password' has moved from NotebookApp to ServerApp. This config w
ill be passed to ServerApp. Be sure to update your config before our next release.
[W 2023-05-19 16:30:17.164 LabApp] 'password' has moved from NotebookApp to ServerApp. This config w
ill be passed to ServerApp. Be sure to update your config before our next release.
[I 2023-05-19 16:30:17.172 LabApp] JupyterLab extension loaded from /home/opc/anaconda3/lib/python3.
9/site-packages/jupyterlab
[I 2023-05-19 16:30:17.172 LabApp] JupyterLab application directory is /home/opc/anaconda3/share/jup
yter/lab
[I 16:30:17.177 NotebookApp] Serving notebooks from local directory: /home/opc
[I 16:30:17.177 NotebookApp] Jupyter Notebook 6.4.8 is running at:
[I 16:30:17.177 NotebookApp] http://localhost:8888/
[I 16:30:17.177 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to s
kip confirmation).
[W 16:30:17.180 NotebookApp] No web browser found: could not locate runnable browser.
```

In our local browser navigate to the Jupyter Lab homepage.

http://localhost:8888/lab

We can now see our new Conda environment ready for use.



Name	Last Modified
anaconda3	9 months ago
Desktop	9 months ago
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Downloads	9 months ago
Music	9 months ago
Pictures	9 months ago
Public	9 months ago
pycharm-community-2022.1.3	9 months ago
sample-envs	9 months ago
Templates	9 months ago
Videos	9 months ago
Anaconda3-2022.05-Linux-x86_6...	a year ago
pycharm-community-2022.1.3.tar....	a year ago

You can now create a new notebook and start running your code.