

## Workshop OCI IaaS

### Assuntos abordados:

- Compartments
- VCN
  - Subnet pública e privada
  - Internet Gateway
  - Nat Gateway
  - Route Table
  - Security List
- Load Balancer Público
- Instance Compute
  - Cloud Init Script
- Configuration Instance
- Instance Pool
- Autoscaling Configuration

Criar VCN:

## Create Virtual Cloud Network

[help](#) [cancel](#)

### NAME

Workshop

### CREATE IN COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

### ☒ CREATE VIRTUAL CLOUD NETWORK ONLY

Creates a Virtual Cloud Network only. You'll still need to set up at least one Subnet, Gateway, and Route Rule to have a working Virtual Cloud Network.

### ☐ CREATE VIRTUAL CLOUD NETWORK PLUS RELATED RESOURCES

Automatically sets up a Virtual Cloud Network with access to the internet. You can set up firewall rules and Security Lists to control ingress and egress traffic to your Instances. All related resources will be created in the same Compartment as the VCN.

### CIDR BLOCK

10.0.0.0/16

If you plan to peer this VCN with another VCN, the VCNs must not have overlapping CIDRs. [Learn more](#)

### 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](#)

### DNS LABEL

Workshop

Only letters and numbers, starting with a letter. 15 characters max.

### DNS DOMAIN NAME READ-ONLY

Workshop.oraclevcn.com

10.0.0.0/16

If you plan to peer this VCN with another VCN, the VCNs must not have overlapping CIDRs. [Learn more](#)

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](#)

DNS LABEL

Workshop

Only letters and numbers, starting with a letter. 15 characters max.

DNS DOMAIN NAME


READ-ONLY

Workshop.oraclevcn.com

TAGS

Tagging is a metadata system that allows you to organize and track resources within your tenancy. Tags are composed of keys and values that can be attached to resources.

[Learn more about tagging](#)

TAG NAMESPACE	TAG KEY	VALUE
None (add a free-form tag) 		

+ Additional Tag

☒ VIEW DETAIL AFTER THIS RESOURCE IS CREATED

Create Virtual Cloud Network

Cancel

Criar internet gateway:

Create Internet Gateway

[help](#) [cancel](#)

NAME

InternetGateway

CREATE IN COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

TAGS

Tagging is a metadata system that allows you to organize and track resources within your tenancy. Tags are composed of keys and values that can be attached to resources.

[Learn more about tagging](#)

TAG NAMESPACE

None (add a free-form tag)

TAG KEY

VALUE

+ Additional Tag

Create Internet Gateway

Cancel

Criar Nat Gateway:

Create NAT Gateway

[help](#) [cancel](#)

A NAT gateway lets instances that don't have public IP addresses access the internet.

NAME

NatGateway

CREATE IN COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

TAGS

Tagging is a metadata system that allows you to organize and track resources within your tenancy. Tags are composed of keys and values that can be attached to resources.

[Learn more about tagging](#)

TAG NAMESPACE

None (add a free-form tag)

TAG KEY

VALUE

+ Additional Tag

Note: A public IP will be automatically created for this NAT gateway.

Create NAT Gateway

Cancel

Criar Route Table Pública:

Create Route Tablehelp cancel

NAME

RTPublica

CREATE IN COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

Route Rules

**Important:** For a route rule that targets a Private IP, you must first enable "Skip Source/Destination Check" on the VNIC that the Private IP is assigned to.

TARGET TYPE

Internet Gateway

DESTINATION CIDR BLOCK

0.0.0.0/0

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

COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

TARGET INTERNET GATEWAY

InternetGateway

+ Additional Route Rule

Criar Route Table Privada:

Create Route Table

[help](#) [cancel](#)

NAME

RTPrivada

CREATE IN COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

Route Rules

**Important:** For a route rule that targets a Private IP, you must first enable "Skip Source/Destination Check" on the VNIC that the Private IP is assigned to.

TARGET TYPE

NAT Gateway

⌵

✕

DESTINATION CIDR BLOCK

0.0.0.0/0

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

COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

TARGET NAT GATEWAY

NatGateway

⌵

+ Additional Route Rule

Criar subnet pública:

## Create Subnet

[help](#) [cancel](#)

If the Route Table, DHCP Options, or Security Lists are in a different Compartment than the Subnet, enable Compartment selection for those resources: [Click here](#)

### NAME

### SUBNET TYPE

☒ REGIONAL (RECOMMENDED)

Instances in the subnet can be created in any availability domain in the region. Useful for high availability.

☐ AVAILABILITY DOMAIN-SPECIFIC

Instances in the subnet can only be created in one availability domain in the region.

### CIDR BLOCK

Specified IP addresses: 10.0.0.0-10.0.0.255 (256 IP addresses)

### ROUTE TABLE



### SUBNET ACCESS

☐ PRIVATE SUBNET

Prohibit public IP addresses for Instances in this Subnet

☒ PUBLIC SUBNET

Allow public IP addresses for Instances in this Subnet

### DNS RESOLUTION

☒ USE DNS HOSTNAMES IN THIS SUBNET ⓘ

Allows assignment of DNS hostname when launching an Instance

### DNS LABEL

Only letters and numbers, starting with a letter. 15 characters max.

DNS LABEL

SubPublica

Only letters and numbers, starting with a letter. 15 characters max.

DNS DOMAIN NAME

READ-ONLY

<dns-label>.workshop.oraclevcn.com

DHCP OPTIONS

Select DHCP Options

Security Lists

SECURITY LIST

Default Security List for Workshop

TAGS

Tagging is a metadata system that allows you to organize and track resources within your tenancy. Tags are composed of keys and values that can be attached to resources.

[Learn more about tagging](#)

TAG NAMESPACE

None (add a free-form tag)

TAG KEY

VALUE

+ Additional Tag

Create Subnet

Cancel

Criar Subnet Privada:



## Create Subnet

[help](#) [cancel](#)

If the Route Table, DHCP Options, or Security Lists are in a different Compartment than the Subnet, enable Compartment selection for those resources: [Click here](#)

### NAME

### SUBNET TYPE

☒ REGIONAL (RECOMMENDED)

Instances in the subnet can be created in any availability domain in the region. Useful for high availability.

☐ AVAILABILITY DOMAIN-SPECIFIC

Instances in the subnet can only be created in one availability domain in the region.

### CIDR BLOCK

Specified IP addresses: 10.0.1.0-10.0.1.255 (256 IP addresses)

### ROUTE TABLE



### SUBNET ACCESS

☒ PRIVATE SUBNET

Prohibit public IP addresses for Instances in this Subnet

☐ PUBLIC SUBNET

Allow public IP addresses for Instances in this Subnet

### DNS RESOLUTION

☒ USE DNS HOSTNAMES IN THIS SUBNET ⓘ

Allows assignment of DNS hostname when launching an Instance

### DNS LABEL

Only letters and numbers, starting with a letter. 15 characters max.

DNS LABEL

SubPrivada

Only letters and numbers, starting with a letter. 15 characters max.

DNS DOMAIN NAME

READ-ONLY

<dns-label>.workshop.oraclevcn.com

DHCP OPTIONS

Select DHCP Options

Security Lists

SECURITY LIST

Default Security List for Workshop

TAGS

Tagging is a metadata system that allows you to organize and track resources within your tenancy. Tags are composed of keys and values that can be attached to resources.

[Learn more about tagging](#)

TAG NAMESPACE

None (add a free-form tag)

TAG KEY

VALUE

+ Additional Tag

Create Subnet

Cancel

Criar LoadBalance:

A load balancer provides automated traffic distribution from one entry point to multiple servers in a backend set. The load balancer ensures that your services remain available by directing traffic only to healthy servers in the backend set.

LOAD BALANCER NAME

LoadBalancer

CHOOSE VISIBILITY TYPE



Public

You can use the assigned public IP address as a front end for incoming traffic.



Private

You can use the assigned private IP address as a front end for internal incoming VCN traffic.

CHOOSE THE MAXIMUM TOTAL BANDWIDTH ⓘ

Small

100 Mbps



Medium

400 Mbps

Large

8000 Mbps

CHOOSE NETWORKING

VIRTUAL CLOUD NETWORK in **Workshop** ([Change Compartment](#))

Workshop



To create a public load balancer, specify a single regional subnet (recommended), or two availability domain-specific subnets in different availability domains.

SUBNET in **Workshop** ([Change Compartment](#))

SubPublica (regional)



☐ USE NETWORK SECURITY GROUPS TO CONTROL TRAFFIC ⓘ

A load balancer distributes traffic to backend servers within a backend set. A backend set is a logical entity defined by a load balancing policy, a health check policy, and a list of backend servers (Compute instances).

SPECIFY A LOAD BALANCING POLICY

Weighted Round Robin

This policy distributes incoming traffic sequentially to each server in a backend set list.



IP Hash

This policy ensures that requests from a particular client are always directed to the same backend server.

Least Connections

This policy routes incoming request traffic to the backend server with the fewest active connections.

SELECT BACKEND SERVERS OPTIONAL

No backend servers selected. Click **Add Backends** to select resources from a list of available Compute instances. You can choose instances from one compartment at a time. After you add instances from one compartment, you can choose **Add More Backends** to add instances from another compartment. You can also add backend servers after you create the load balancer.

**Add Backends**

SPECIFY HEALTH CHECK POLICY

A health check is a test to confirm the availability of backend servers. A health check can be a request or a connection attempt. Based on a time interval you specify, the load balancer applies the health check policy to continuously monitor backend servers.

PROTOCOL

HTTP

PORT OPTIONAL

80

INTERVAL IN MS OPTIONAL

100000

TIMEOUT IN MS OPTIONAL

3000

NUMBER OF RETRIES OPTIONAL

3

STATUS CODE OPTIONAL

200

URL PATH (URI)

/

RESPONSE BODY REGEX OPTIONAL

A listener is a logical entity that checks for incoming traffic on the load balancer's IP address. To handle TCP, HTTP and HTTPS traffic, you must configure at least one listener per traffic type. You can configure additional listeners after you create your load balancer.

LISTENER NAME

listener\_HTTP

SPECIFY THE TYPE OF TRAFFIC YOUR LISTENER HANDLES

HTTPS

HTTP ✓

TCP

SPECIFY THE PORT YOUR LISTENER MONITORS FOR INGRESS TRAFFIC

80

You can configure path route rules and custom header rule sets after you create the load balancer. For more information, see [Managing Request Routing](#) and [Managing Rule Sets](#).

## Criar Instância:

### Shape e limites

VM.Standard.B1.1	n/a	n/a	2	0	2	0	2	0
------------------	-----	-----	---	---	---	---	---	---

## Create Compute Instance

Name your instance

Inst\_01

Choose an operating system or image source ⓘ



Oracle Linux 7.7  
Image Build: 2019.09.25-0

Change Image Source

[Hide Shape](#) [Network](#) [Storage Options](#)

Availability Domain

AD 1

LWII:PHX-AD-1 ✓

AD 2

LWII:PHX-AD-2

AD 3

LWII:PHX-AD-3

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 server access for highest performance and strong isolation.

#### Instance Shape

VM.Standard.B1.1 (Virtual Machine)

1 Core OCPU, 12 GB Memory

Change Shape

#### Configure networking

Virtual cloud network compartment

Workshop

yusukeyurameshi02 (root)/Workshop

Virtual cloud network

Workshop

Subnet compartment

Workshop

yusukeyurameshi02 (root)/Workshop

Subnet ⓘ

SubPrivada (Regional)

☐ Use network security groups to control traffic ⓘ

☒ Do not assign public IP address ☐ Assign public IP address

#### Boot volume

Default boot volume size: 46.6 GB

☐ Custom boot volume size (in GB)

☐ Use in-transit encryption ⓘ

☐ Choose a key from Key Management to encrypt this volume

#### Add SSH key ⓘ

☒ Choose SSH key file ☐ Paste SSH keys

Choose SSH key file (.pub) from your computer

Public\_key\_manual.pub

Choose Files

 [Hide Advanced Options](#)

Management Networking Image Host

Choose a compartment for your instance

Workshop

yusukeyurameshi02 (root)/Workshop

Choose a fault domain

FAULT-DOMAIN-1

User data

You can choose to specify a startup script that will run when your instance boots up or restarts. Startup scripts can be used to install software and updates, and to ensure that services are running within the virtual machine.

☒ Choose cloud-init script file ☐ Paste cloud-init script

cloud\_init\_script

Choose File

Oracle Cloud Agent 

☒ Enable monitoring


Collect metrics to monitor this instance's health, capacity, and performance. When enabled, Oracle Cloud Agent emits metrics for this instance to the Monitoring service.

Create

[Cancel](#)

## Conteúdo CloudInit Script:

```
#!/bin/bash -x
echo '##### webserver userdata begins #####'
touch ~opc/userdata.`date +%s`.start
# echo '##### yum update all #####'
# yum update -y
echo '##### basic webserver #####'
yum install -y httpd php stress
systemctl enable httpd.service
systemctl start httpd.service
echo '<html><head><meta http-equiv="refresh" content="3"></head><body><pre><code>
<?php
echo gethostname();
$ip_server = $_SERVER['SERVER_ADDR'];
echo "<br><h1><b>Server IP Address is: $ip_server</b></h1><br>";
?>' >> /var/www/html/index.php
echo '' >> /var/www/html/index.php
cat /etc/os-release >> /var/www/html/index.php
echo '</code></pre></body></html>' >> /var/www/html/index.php
firewall-offline-cmd --add-service=http
systemctl enable firewalld
systemctl restart firewalld
touch ~opc/userdata.`date +%s`.finish
echo '##### webserver userdata ends #####'
```



RUNNING

## Inst\_01

[Start](#) [Stop](#) [Reboot](#) [Move Resource](#) [Apply Tag\(s\)](#) [Actions](#)

Instance Information

Tags

### Instance Information

**Availability Domain:** LWtl:PHX-AD-1

**Fault Domain:** FAULT-DOMAIN-1

**Region:** phx

**Shape:** VM.Standard.B1.1

**Virtual Cloud Network:** [Workshop](#)

**Maintenance Reboot:** -

**Image:** [Oracle-Linux-7.7-2019.09.25-0](#)

**OCID:** ...thuhpa [Show](#) [Copy](#)

**Launched:** Wed, 02 Oct 2019 13:59:31 UTC

**Compartment:** yusukeyurameshi02 (root)/Workshop

**Launch Mode:** NATIVE

### Primary VNIC Information

**Private IP Address:** 10.0.1.2

**Public IP Address:** [Unavailable](#)

**Network Security Groups:** None [Edit](#)

**Internal FQDN:** inst-01... [Show](#) [Copy](#)

**Subnet:** [SubPrivada](#)

This instance's traffic is controlled by its firewall rules in addition to the associated [Subnet's](#) security lists and the VNIC's network security groups.

### Launch Options

**NIC Attachment Type:** VFIO

**Remote Data Volume:** PARAVIRTUALIZED

**Firmware:** UEFI\_64

**Boot Volume Type:** PARAVIRTUALIZED

Atualizar o LoadBalancer:

## Add Backends

[Help](#)

Choose how to add backend servers by selecting compute instances or by entering IP addresses.

☒ COMPUTE INSTANCES ☐ IP ADDRESSES

Specify the compute instances to include in your set of backend servers.

INSTANCES in **Workshop** ([Change Compartment](#))

<input checked="" type="checkbox"/>	Name	IP Address	OCID	Availability Domain	Port	Weight
<input checked="" type="checkbox"/>	Inst_01	10.0.1.2	...thuhpa <a href="#">Show</a> <a href="#">Copy</a>	LWtl:PHX-AD-1	<input type="text" value="80"/>	<input type="text" value="1"/>

1 Selected

Showing 1 Item < Page 1 >

To enable load balancer traffic, add ingress and egress security list rules to the corresponding subnets.

☐ MANUALLY CONFIGURE SECURITY LIST RULES AFTER THE BACKEND SERVERS ARE ADDED ☒ AUTOMATICALLY ADD SECURITY LIST RULES

Select a security list for each load balancer subnet, and then check the egress security rules you want to apply.

Security List	Subnet	Egress Rules (Allow Sending Traffic To)
<div>Default Security List for Workshop</div>	SubPublica	<input checked="" type="checkbox"/> SUBNET: 10.0.1.0/24 PORT: 80

Showing 1 Item

Select a security list for each load balancer subnet, and then check the ingress security rules you want to apply.

Security List	Subnet	Ingress Rules (Allow Receiving Traffic From)
<div></div>		

[Add](#) [Cancel](#)

Atualizar a Security List:

Add Ingress Rules

cancel

Ingress Rule 1

Allows TCP traffic 80

☐ 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 ⓘ

80

Examples: 80, 20-22

+ Additional Ingress Rule

Add Ingress Rules

Cancel

Acessar o IP do LoadBalancer:





inst-01

**Server IP Address is: 10.0.1.2**

```
NAME="Oracle Linux Server"
VERSION="7.7"
ID="ol"
ID_LIKE="fedora"
VARIANT="Server"
VARIANT_ID="server"
VERSION_ID="7.7"
PRETTY_NAME="Oracle Linux Server 7.7"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:oracle:linux:7:7:server"
HOME_URL="https://linux.oracle.com/"
BUG_REPORT_URL="https://bugzilla.oracle.com/"

ORACLE_BUGZILLA_PRODUCT="Oracle Linux 7"
ORACLE_BUGZILLA_PRODUCT_VERSION=7.7
ORACLE_SUPPORT_PRODUCT="Oracle Linux"
ORACLE_SUPPORT_PRODUCT_VERSION=7.7
```

Criar Instance Configuration:

Create Instance Configuration from Instance [help](#) [cancel](#)

This will create a new Instance Configuration based on the Instance 'Inst\_01'.

CREATE IN COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

INSTANCE CONFIGURATION NAME

instanceconfig-20191002-1106

[Show Tagging Options](#)

Create Instance Configuration Cancel

Criar Instance Pool:

## Create Instance Pool

[help](#) [cancel](#)

### CREATE IN COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

### INSTANCE POOL NAME

instance-pool-20191002-1106

### NUMBER OF INSTANCES

1

The maximum number of instances is based on the limits for your tenancy.

## Configuration

**Boot Volume Type:** Oracle-Provided OS Image

**Compartment:** yusukeyurameshi02 (root)/Workshop

**Image Operating System:** Oracle Linux 7.7

**Shape Type:** Virtual Machine

**Shape:** VM.Standard.B1.1 (1 OCPU, 12GB RAM)

**Boot Volume Size (in GB):** 46.6 GB

☒ ATTACH A LOAD BALANCER

## Load Balancer Information ⓘ

### LOAD BALANCER COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

### LOAD BALANCER

LoadBalancer

BACKEND SET

bs\_lb\_2019-1002-1050



PORT

80

VNIC

Primary VNIC



Availability Domain Selection 1



AVAILABILITY DOMAIN

AD 1



Primary VNIC

VIRTUAL CLOUD NETWORK COMPARTMENT

Workshop



yusukeyurameshi02 (root)/Workshop

VIRTUAL CLOUD NETWORK

Workshop



SUBNET COMPARTMENT

Workshop



yusukeyurameshi02 (root)/Workshop

SUBNET ⓘ

SubPrivada (Regional)



Availability Domain Selection 2

AVAILABILITY DOMAIN

AD 2

Primary VNIC

VIRTUAL CLOUD NETWORK COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

VIRTUAL CLOUD NETWORK

Workshop

SUBNET COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

SUBNET ⓘ

SubPrivada (Regional)

Availability Domain Selection 3

AVAILABILITY DOMAIN

AD 3

Primary VNIC

VIRTUAL CLOUD NETWORK COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

VIRTUAL CLOUD NETWORK

Workshop

SUBNET COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

SUBNET ⓘ

SubPrivada (Regional)

## Instances *in* Workshop *Compartment*

Create Instance

Sort by:	Created Date (Desc)	Displaying 2 Instances < Page 1 >		
<div><div></div><div>   </div></div> <div>RUNNING</div>	<a href="#">inst-x92xd-instance-pool-20191002-1106</a> OCID: ..ecaopa <a href="#">Show</a> <a href="#">Copy</a>	Shape: VM.Standard.B1.1	Region: phx Availability Domain: LWt:PHX-AD-1 Fault Domain: FAULT-DOMAIN-2	Created: Wed, 02 Oct 2019 14:09:39 UTC Maintenance Reboot: - <div>...</div>
<div><div></div><div>   </div></div> <div>RUNNING</div>	<a href="#">Inst_01</a> OCID: ..thuhpa <a href="#">Show</a> <a href="#">Copy</a>	Shape: VM.Standard.B1.1	Region: phx Availability Domain: LWt:PHX-AD-1 Fault Domain: FAULT-DOMAIN-1	Created: Wed, 02 Oct 2019 13:59:31 UTC Maintenance Reboot: - <div>...</div>
Displaying 2 Instances < Page 1 >				

Terminar a instância original e retirar do load balancer:

Instances in

Create Instance

Sort by: Created Date

inst-x92xd-instance-pool-20191002-1106

OCID: ...ecaopa

Shape: VM.Standard.B1.1

Region: phx

Availability Domain: LWtl:PHX-AD-1

Fault Domain: FAULT-DOMAIN-2

Created: W

Maintenan

Inst\_01

OCID: ...thuhpa

Shape: VM.Standard.B1.1

Region: phx

Availability Domain: LWtl:PHX-AD-1

Fault Domain: FAULT-DOMAIN-1

Created: W

Maintenan

Confirm

Are you sure you want to terminate the Instance named "Inst\_01"?

☒ Permanently delete the attached Boot Volume

Terminate Instance

Cancel

bs\_lb\_2019-1002-1050

Edit Update Health Check

Backend Set Information

Policy: Weighted Round Robin

Load Balancer: LoadBalancer

Overall Health

Unknown

Backends Health

0 Critical

0 Warning

1 Unknown

1 OK

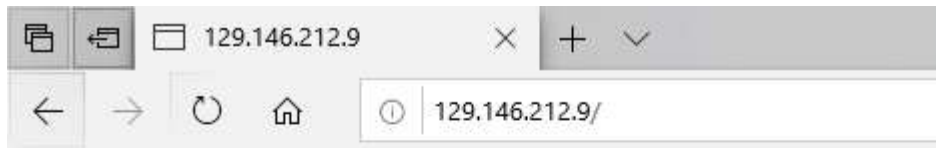
Backends

Add Backends

Actions

Search...

	IP Address	Port	Weight	Drain	Offline	Backup	Health
<input checked="" type="checkbox"/>	10.0.1.2	80	1	False	False	False	OK
<input type="checkbox"/>	10.0.1.3	80	1	False	False	False	Unknown



inst-01-7685

**Server IP Address is: 10.0.1.3**

```
NAME="Oracle Linux Server"
VERSION="7.7"
ID="ol"
ID_LIKE="fedora"
VARIANT="Server"
VARIANT_ID="server"
VERSION_ID="7.7"
PRETTY_NAME="Oracle Linux Server 7.7"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:oracle:linux:7:7:server"
HOME_URL="https://linux.oracle.com/"
BUG_REPORT_URL="https://bugzilla.oracle.com/"

ORACLE_BUGZILLA_PRODUCT="Oracle Linux 7"
ORACLE_BUGZILLA_PRODUCT_VERSION=7.7
ORACLE_SUPPORT_PRODUCT="Oracle Linux"
ORACLE_SUPPORT_PRODUCT_VERSION=7.7
```

Criar Autoscaling Configuration:

## Create Autoscaling Configuration

[help](#) [cancel](#)

### AUTOSCALING CONFIGURATION COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

### AUTOSCALING CONFIGURATION NAME

autoscaling-config-20191002-1109

### COOLDOWN IN SECONDS ⓘ

300

The minimum value is 300 seconds, which is also the default value.

## Instance Pool

### INSTANCE POOL COMPARTMENT

Workshop

yusukeyurameshi02 (root)/Workshop

### INSTANCE POOL

instance-pool-20191002-1106



Ensure that you [enable monitoring](#) to allow the instances in this instance pool to emit metrics. Autoscaling relies on these metrics to take autoscaling actions.

Autoscaling Policy

AUTOSCALING POLICY NAME

autoscaling-policy-20191002-1109

PERFORMANCE METRIC ⓘ

CPU Utilization

Scaling Limits

MINIMUM NUMBER OF INSTANCES

1

MAXIMUM NUMBER OF INSTANCES

6

The maximum number of instances is based on the limits for your tenancy.

INITIAL NUMBER OF INSTANCES

1

Scaling Rule

SCALE-OUT OPERATOR

Greater than (>)

THRESHOLD PERCENTAGE ⓘ

80

NUMBER OF INSTANCES TO ADD

5

SCALE-IN OPERATOR

Less than (<)

THRESHOLD PERCENTAGE ⓘ

10

NUMBER OF INSTANCES TO REMOVE

1

Show Tagging Options

Create

Cancel

Criar Instancia para acesso a rede privada:



## Create Compute Instance

Name your instance

jumpserver

Choose an operating system or image source ⓘ



Oracle Linux 7.7  
Image Build: 2019.09.25-0

Change Image Source

[Hide Shape](#) [Network](#) [Storage Options](#)

Availability Domain

AD 1

LWti:PHX-AD-1

AD 2

LWti:PHX-AD-2

AD 3

LWti:PHX-AD-3

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 server access for highest performance and strong isolation.

## Create Compute Instance

Instance Shape

VM.Standard2.1 (Virtual Machine)

1 Core OCPU, 15 GB Memory

Change Shape

Configure networking

Virtual cloud network compartment

Workshop

yusukeyurameshi02 (root)/Workshop

Virtual cloud network

Workshop

Subnet compartment

Workshop

yusukeyurameshi02 (root)/Workshop

Subnet ⓘ

SubPublica (Regional)

☐ Use network security groups to control traffic ⓘ

☐ Do not assign public IP address ☒ Assign public IP address

## jumpserver

Start Stop Reboot Move Resource Apply Tag(s) Actions ▾

Instance Information Tags

### Instance Information

**Availability Domain:** LWtl:PHX-AD-1  
**Fault Domain:** FAULT-DOMAIN-3  
**Region:** phx  
**Shape:** VM.Standard2.1 ⓘ  
**Virtual Cloud Network:** [Workshop](#)  
**Maintenance Reboot:** -

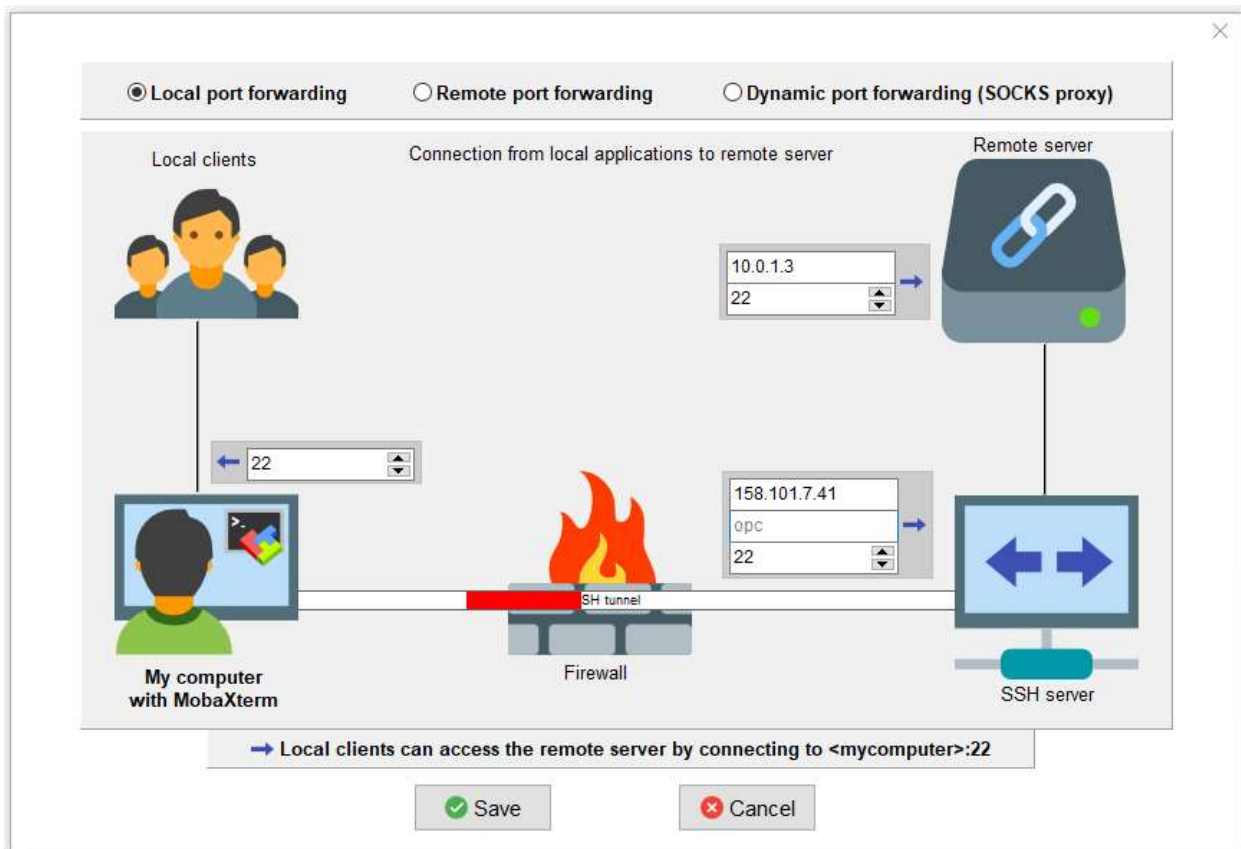
**Image:** [Oracle-Linux-7.7-2019.09.25-0](#)  
**OCID:** ...mdx6ta [Show](#) [Copy](#)  
**Launched:** Wed, 02 Oct 2019 14:18:48 UTC  
**Compartment:** yusukeyurameshi02 (root)/Workshop  
**Launch Mode:** NATIVE

### Primary VNIC Information

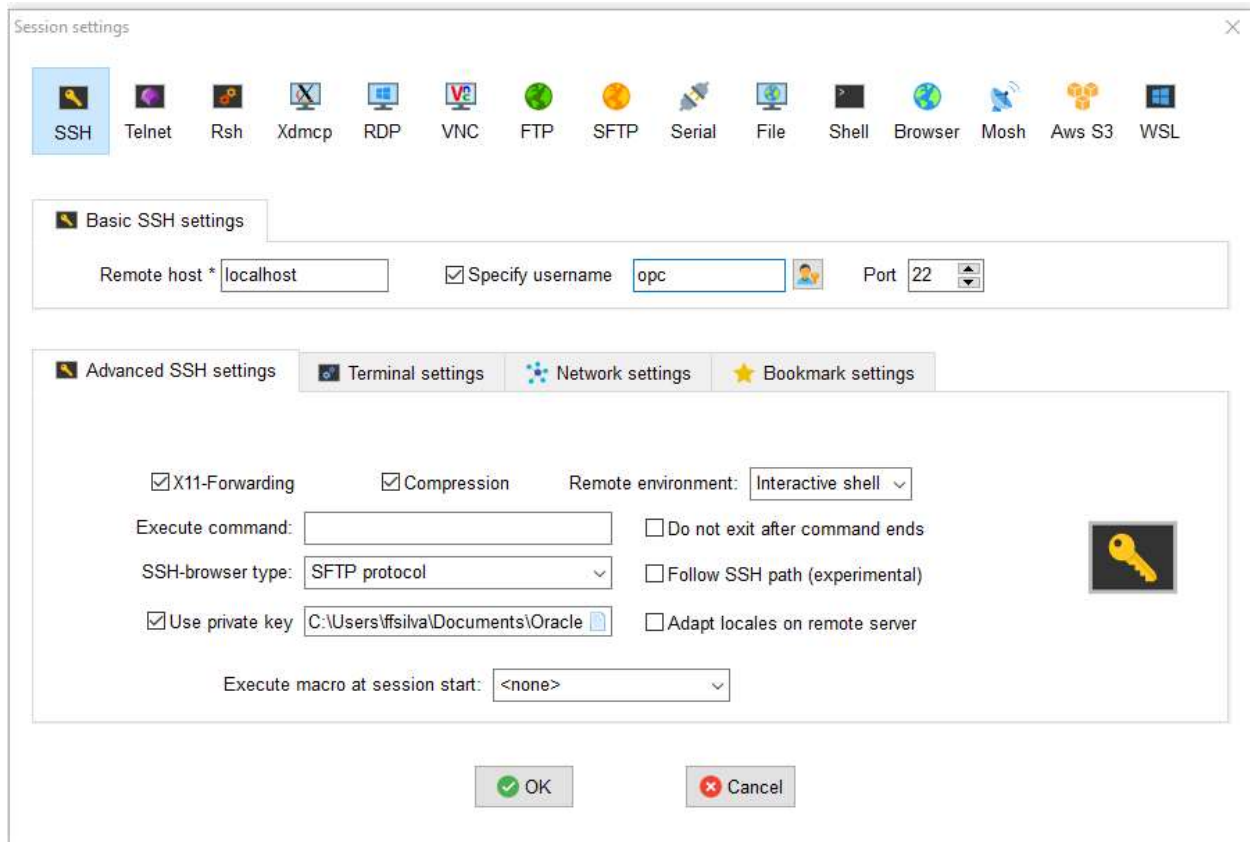
**Private IP Address:** 10.0.0.4  
**Public IP Address:** 158.101.7.41  
**Network Security Groups:** None [Edit](#)

**Internal FQDN:** jumpserver... [Show](#) [Copy](#)  
**Subnet:** [SubPublica](#)

Montar tunel ssh:



Acessar o JumpServer:







Gerar 100% de cpu na instância web:

```
[opc@inst-01-7685 ~]$ stress --cpu 2
stress: info: [11990] dispatching hogs: 2 cpu, 0 io, 0 vm, 0 hdd
```

Instâncias sendo criadas automaticamente:

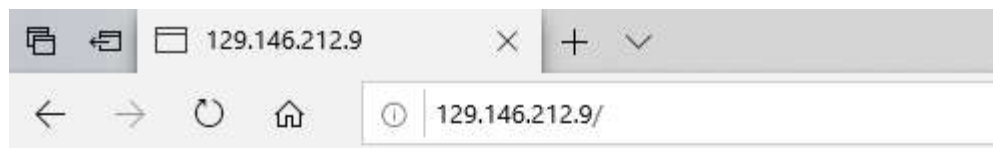
## Instances *in* Workshop *Compartment*

Create Instance					
Sort by: Created Date (Desc) ▾		Displaying 8 Instances < Page 1 >			
 PROVISIONING...	<a href="#">inst-fbjrn-instance-pool-20191002-1106</a> OCID: ...625cva <a href="#">Show</a> <a href="#">Copy</a>	Shape: VM.Standard.B1.1	Region: phx Availability Domain: LWt:PHX-AD-2 Fault Domain: FAULT-DOMAIN-1	Created: Wed, 02 Oct 2019 14:30:45 UTC Maintenance Reboot: -	...
 PROVISIONING...	<a href="#">inst-epugi-instance-pool-20191002-1106</a> OCID: ...625cva <a href="#">Show</a> <a href="#">Copy</a>	Shape: VM.Standard.B1.1	Region: phx Availability Domain: LWt:PHX-AD-2 Fault Domain: FAULT-DOMAIN-3	Created: Wed, 02 Oct 2019 14:30:42 UTC Maintenance Reboot: -	...
 PROVISIONING...	<a href="#">inst-6zahq-instance-pool-20191002-1106</a> OCID: ...625cva <a href="#">Show</a> <a href="#">Copy</a>	Shape: VM.Standard.B1.1	Region: phx Availability Domain: LWt:PHX-AD-3 Fault Domain: FAULT-DOMAIN-2	Created: Wed, 02 Oct 2019 14:30:40 UTC Maintenance Reboot: -	...
 PROVISIONING...	<a href="#">inst-6ubdj-instance-pool-20191002-1106</a> OCID: ...625cva <a href="#">Show</a> <a href="#">Copy</a>	Shape: VM.Standard.B1.1	Region: phx Availability Domain: LWt:PHX-AD-3 Fault Domain: FAULT-DOMAIN-1	Created: Wed, 02 Oct 2019 14:30:37 UTC Maintenance Reboot: -	...
 PROVISIONING...	<a href="#">inst-rwnni-instance-pool-20191002-1106</a> OCID: ...625cva <a href="#">Show</a> <a href="#">Copy</a>	Shape: VM.Standard.B1.1	Region: phx Availability Domain: LWt:PHX-AD-1 Fault Domain: FAULT-DOMAIN-3	Created: Wed, 02 Oct 2019 14:30:37 UTC Maintenance Reboot: -	...

Load Balancer Funcionando:

## Backends

Add Backends		Actions ▾						Search...	
<input type="checkbox"/>	IP Address	Port	Weight	Drain	Offline	Backup	Health		
<input type="checkbox"/>	10.0.1.3	80	1	False	False	False	OK		
<input type="checkbox"/>	10.0.1.4	80	1	False	False	False	Unknown		
<input type="checkbox"/>	10.0.1.5	80	1	False	False	False	Unknown		
<input type="checkbox"/>	10.0.1.6	80	1	False	False	False	Unknown		
<input type="checkbox"/>	10.0.1.7	80	1	False	False	False	Unknown		
<input type="checkbox"/>	10.0.1.8	80	1	False	False	False	Unknown		
0 Selected								Showing 6 Items < Page 1 >	

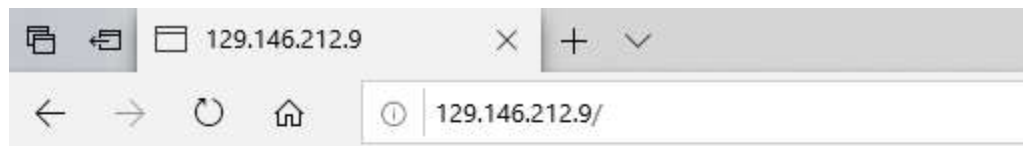


inst-01-7685

**Server IP Address is: 10.0.1.3**

```
NAME="Oracle Linux Server"
VERSION="7.7"
ID="ol"
ID_LIKE="fedora"
VARIANT="Server"
VARIANT_ID="server"
VERSION_ID="7.7"
PRETTY_NAME="Oracle Linux Server 7.7"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:oracle:linux:7:7:server"
HOME_URL="https://linux.oracle.com/"
BUG_REPORT_URL="https://bugzilla.oracle.com/"
```

```
ORACLE_BUGZILLA_PRODUCT="Oracle Linux 7"
ORACLE_BUGZILLA_PRODUCT_VERSION=7.7
ORACLE_SUPPORT_PRODUCT="Oracle Linux"
ORACLE_SUPPORT_PRODUCT_VERSION=7.7
```



inst-01-3825

**Server IP Address is: 10.0.1.5**

```
NAME="Oracle Linux Server"
VERSION="7.7"
ID="ol"
ID_LIKE="fedora"
VARIANT="Server"
VARIANT_ID="server"
VERSION_ID="7.7"
PRETTY_NAME="Oracle Linux Server 7.7"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:oracle:linux:7:7:server"
HOME_URL="https://linux.oracle.com/"
BUG_REPORT_URL="https://bugzilla.oracle.com/"

ORACLE_BUGZILLA_PRODUCT="Oracle Linux 7"
ORACLE_BUGZILLA_PRODUCT_VERSION=7.7
ORACLE_SUPPORT_PRODUCT="Oracle Linux"
ORACLE_SUPPORT_PRODUCT_VERSION=7.7
```