

Hands On Lab 1 Conexión OCI desde Equinix.



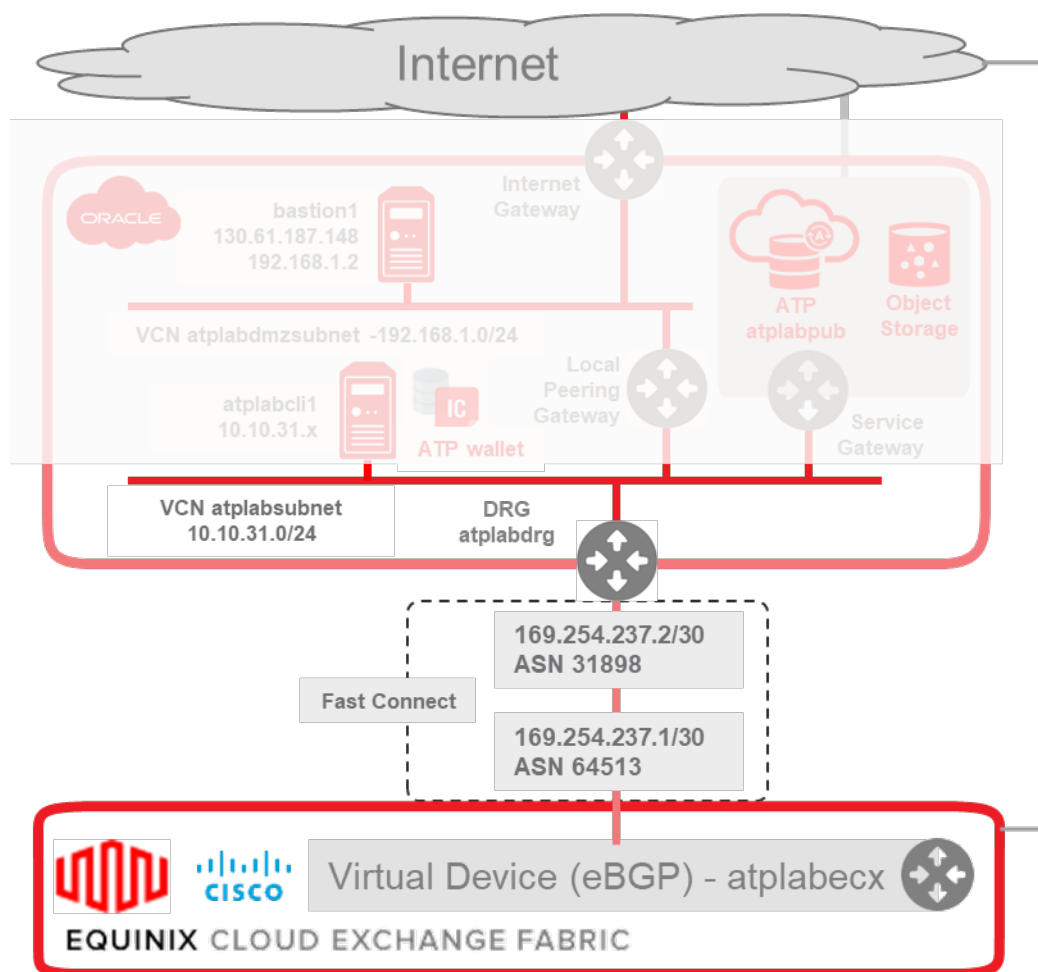
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Objetivo del Laboratorio

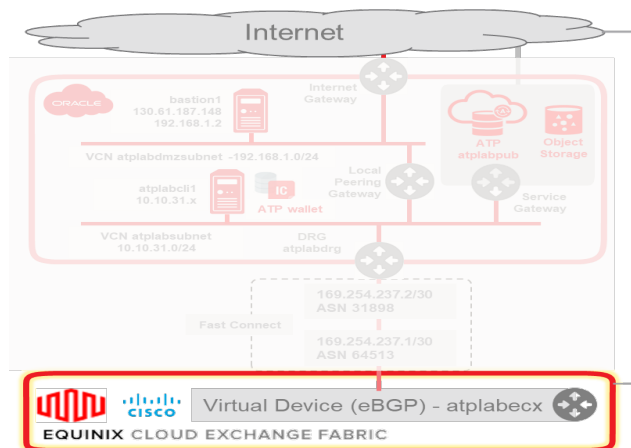
El objetivo de este laboratorio es crear la red de comunicaciones entre Oracle Cloud Infrastructure (OCI) y el proveedor de conexión de Data Center Equinix a través de Fast Connect y Equinix Cloud Exchange Fabric. También dejará preparado el Dynamic Route Gateway (DRG) en OCI para conectar en los siguientes laboratorios las redes desde Amazon AWS y Google Cloud Platform (GCP).



Configuración desde la parte de Equinix:

¿Qué voy a hacer?

Va a crear el router virtual de Equinix cloud Exchange fabric para poder realizar más adelante la configuración eBGP con OCI.



Conexiones:

Consola Equinix	https://ecxfabric.equinix.com
Usuario	Utilice las credenciales proporcionadas
Clave	Utilice las credenciales proporcionadas

En primer lugar, hacemos log in en la consola de inicio de Equinix con nuestro nombre de usuario y contraseña.

Equinix

Log In

Welcome to ECX Fabric. Please sign in to continue.

Username

Password

Forgot your Username or Password?

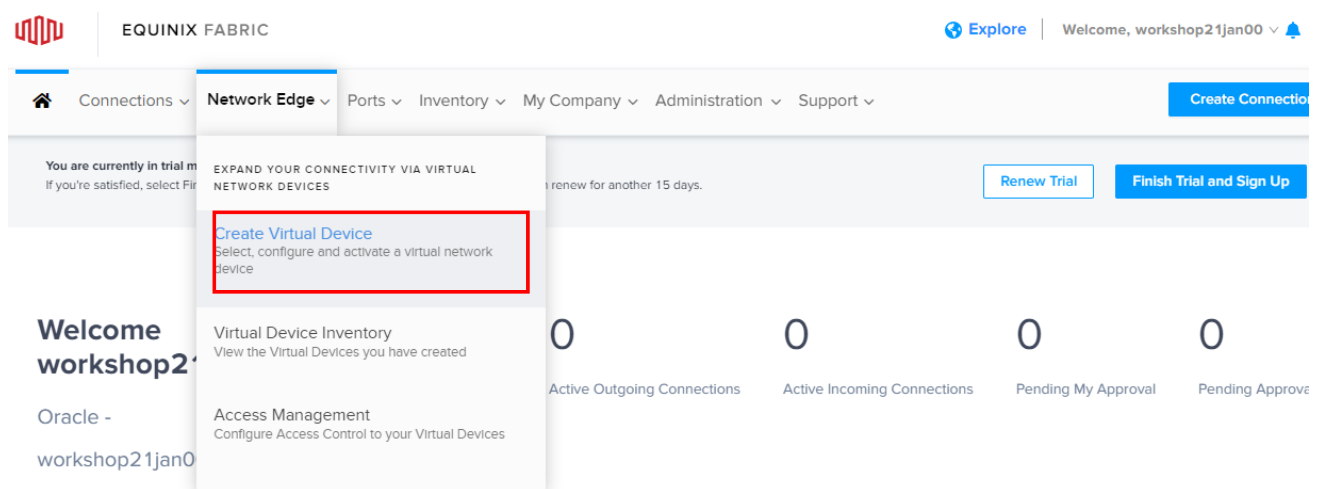
Don't have an account? Request an account

Log In

Una vez dentro, accedemos a la consola de administración de cloud en Equinix. Desde aquí podemos crear tanto conexiones a nuestros clouds como configuraciones de red.

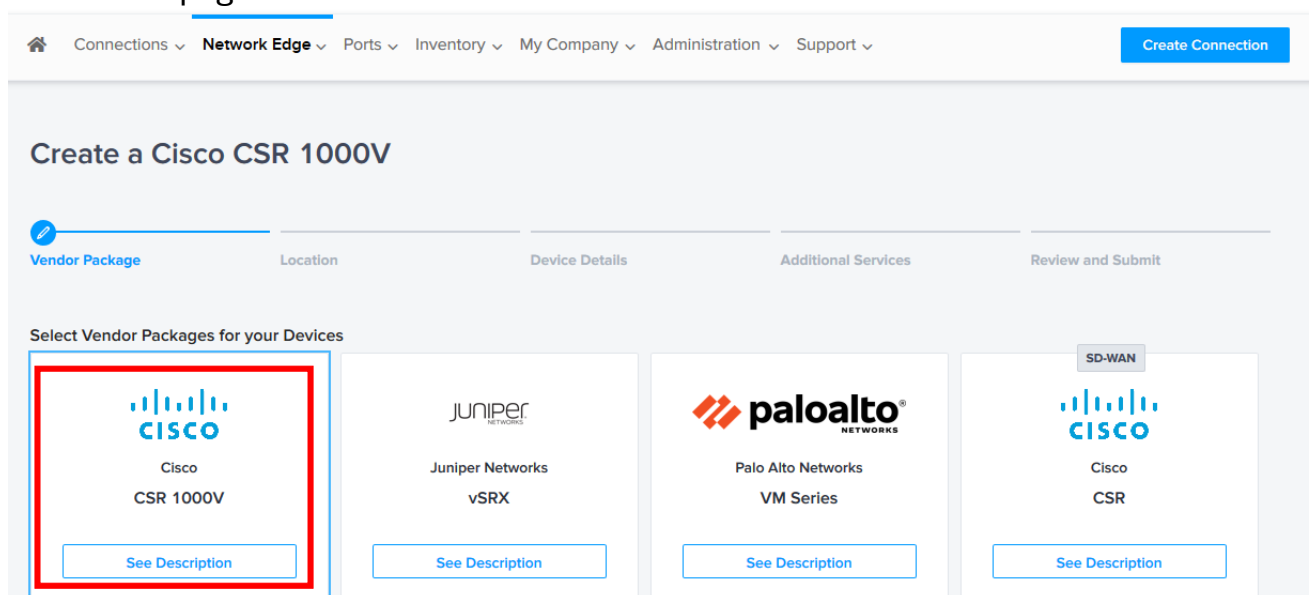


Para empezar, vamos a crear un nuevo dispositivo virtual 'Create Virtual Device'.



Va a crear un router **CISCO CSR 1000V**. Por favor siga la configuración paso a paso.

En la siguiente pantalla escoja Cisco CSR 1000V y haga click en el botón **Continue** al fondo de la página:



Dentro del paso a paso para crear este router, hay que proporcionar datos como la región en la que se va a ubicar el dispositivo. El primer paso es seleccionar la región en la que se va a situar el router (en este caso **Frankfurt**) y presiona el botón **Next: Device Details**.



Create a Cisco CSR 1000V

[Report an Issue](#)

Vendor Package **Location** Device Details Additional Services Review and Submit

Select Edge Device Location

Choose the Metro where this new Edge Device will be deployed.

Select Metro

Silicon Valley	Chicago	Dallas	London	Frankfurt
Amsterdam	Singapore	Sydney	Seattle	Toronto
Hong Kong	Tokyo	Sao Paulo		

Back Cancel Delete Draft Device Save **Next: Device Details**

En segundo lugar, hay que nombrar el dispositivo y el host en el que se encuentra. Seleccione la licencia de ancho de banda para el router e introduzca un correo electrónico para recibir notificaciones.

Device name	Atplabecx
Host name prefix	Atplabecx
Mail	Your mail
Select License Throughput	50 Mbps
Software Package & Version	La última versión que aparezca (16.09.05)



Create a Cisco CSR 1000V



Vendor Package



Location



Device Details

Additional Services

Device Configuration

Select an option: have Equinix configure your device or configure it yourself.

Equinix-Configured

Equinix will configure connectivity for your device via the ECX Fabric portal. This configuration includes services like VPN and BGP. This type of device has restricted access.

Self-Configured

Provision and configure your own services. This type of device has less restricted access.

Licensing

Would you like Equinix to provide a license or will you provide your own license?


Subscription

Equinix provides the software license for you, then bills you for the service. This option includes end-to-end support.

Bring your Own License

Use your existing software license. This option includes limited Equinix support.

Device Resources

Select the appropriate resource below. 

2 Cores, 4 GB Memory

4 Cores, 4 GB Memory

6 Cores, 4 GB Memory

Software Package

Select software package 

Security

Version

Select a version 

16.09.02

16.09.03

16.09.05



License Throughput
Select a license throughput. ⓘ

50 Mbps 1 Gbps 2.5 Gbps 5 Gbps 10 Gbps

Virtual Device Details

Device Name ⓘ
Atplabeex ✓

Host Name Prefix ⓘ
Atplabeex ✓

Optional Details

Order Reference/Identifier Optional
Enter a short name/number to identify this order on the invoice.

Reference ⓘ

0/100

Interfaces
Select the number of interfaces for your device

6 Interfaces (Default) ▾

Device Status Notifications
Enter up to 5 email address(es) that will receive device status notifications.

workshop2020101401@mybestdemo.com ✓

[Add Email\(s\)](#)

[Back](#) [Cancel](#) [Delete Draft Device](#) [Save](#) [Next: Additional Services](#)

Seleccione el botón **Next Additional Services** para añadir nuevos usuarios, así como IPs de acceso al dispositivo recién creado.

Esta parte no se utilizará realmente en el laboratorio por lo que puede obviar esta configuración y pasar directamente por el siguiente menú sin hacer nada.

El último paso de este proceso sería revisar todos los datos introducidos para ello pulse sobre el botón **Next: Review**.



Create a Cisco CSR 1000V

Vendor Package

Location

Device Details

Additional Services

Review and Submit

Add Users

Define up to 5 distinct user credentials that will be loaded as an access control list for users accessing your Edge Device via SSH/HTTPS.

☐ Primary Device

Add Access IP Addresses

Define one or more IP address subnets that will be loaded as an access control list for users accessing your virtual device.

☐ Primary Device

Back

Cancel

Save

Next: Review

A continuación, hay que aceptar los términos y condiciones, para ello presione el botón **Review and Accept Order Terms**. En la ventana emergente seleccione **I have read and understand these terms** y presione el botón **Accept**.

Terms and Conditions

Before your order can be submitted, you must do two things.

Review and Accept Order Terms

Not Accepted

Terms and Conditions

Read and scroll to the bottom of these terms to continue.

Print Order Terms

By clicking "Accept" or "Create Edge Device" you are agreeing to the terms and conditions of this Order on behalf of the Customer identified herein. You are acknowledging and hereby representing that you have the full authority to act on behalf of the Customer and to enter into and legally bind Customer to this Order, which is governed by and incorporates by reference the Digital Services Agreement or other similar agreement between Customer (or its Affiliate) and the Equinix entity (or its Affiliate) identified therein ("Agreement"). Unless otherwise defined in this Order or if the context requires otherwise, all capitalized terms used in this Order shall have the meanings ascribed to them in the Agreement or the applicable Product Policy. "Product(s)" as used in this Order means all the products and services specified in this Order. Additional terms and conditions applicable to the Products can be found at the following URL: <http://www.equinix.com/resources/product-documents> and which are incorporated by reference into this Order. The initial term of this Order is stated herein ("Initial Term"), and will commence on the date the Products are delivered. All Products selected as part of this Order are subject to availability. Customer accepts responsibility to click on and agree to the Third-Party Product provider's terms and conditions presented to Customer when purchasing a license as part of the Order. Customer will ensure it remains compliant with all Third-Party Product provider's terms and conditions during the term of this Order. Equinix, in its sole discretion, reserves the right to reject any handwritten or typed modification to this Order which is not mutually agreed to in writing. If you have any questions regarding the terms of this Order, please contact your Equinix Sales Representative.

☒ I have read and understand these terms.

Cancel

Decline

Accept



Y por último pulsar sobre el botón **Create Edge Device** para crear el dispositivo de red en Equinix.

Create a Cisco CSR 1000V

✓ Vendor Package

✓ Location

✓ Device Details

✓ Additional Services

Review and Submit

Device Preview

✕

Atplabecx
Frankfurt
Cisco | CSR 1000V | Router

Device Details

Virtual Device Name	Atplabecx
Host Name Prefix	Atplabecx
Location	Frankfurt
Device Type	Router
Vendor	Cisco
Model	CSR 1000V
Device Configuration	Equinix-Configured
License	Sub
Device Resources	2 Cores, 4 GB Memory
Software Package	Security
Version	16.09.05
License Throughput	50 Mbps
Interfaces	6
Term Length	1 Month(s)
Device Notification Email(s)	workshop2020101401@mybestdemo.com

Terms & Conditions

Before your order can be submitted, you must do two things. 1. Click on the Vendor terms and 2. Click on the Order Terms, then review and accept them.

[Order Terms](#) | ☒ Accepted

Additional Services

SSH/HTTPS Access	Not Enabled
Access IP Addresses Subnet(s) or FQDN(s)	No IP or network address was added to the access list

BackCancel

Delete Draft DeviceSave

Create Virtual Device

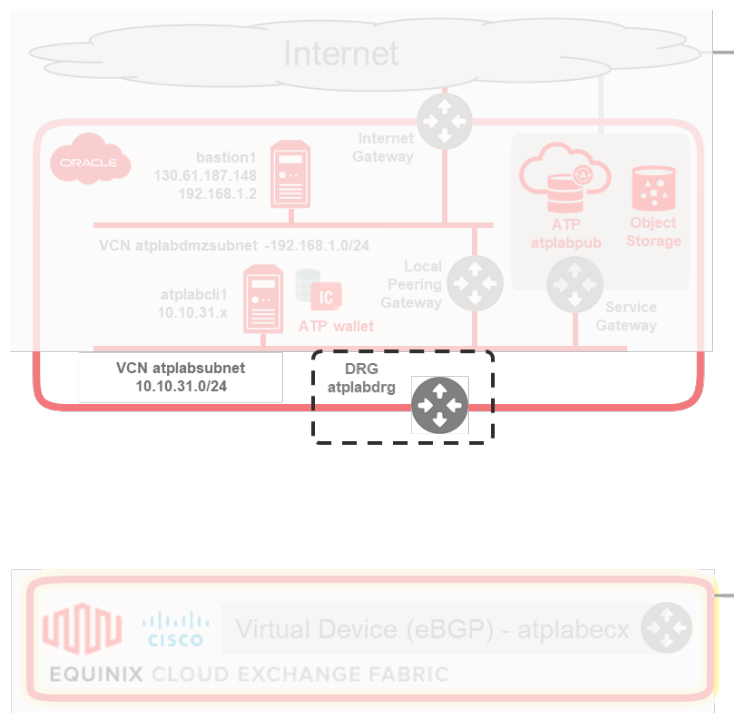
El dispositivo tardará unos minutos en ser provisionado. Durante este tiempo, puede continuar con el workshop.



Configuración de red desde Oracle Cloud Infrastructure.

¿Qué voy a hacer?

Va a crear un Dynamic Routing Gateway DRG en OCI. Este DRG se usará para realizar el tráfico de red entre OCI y Equinix al resto de redes y también a los servicios SaaS de OCI.

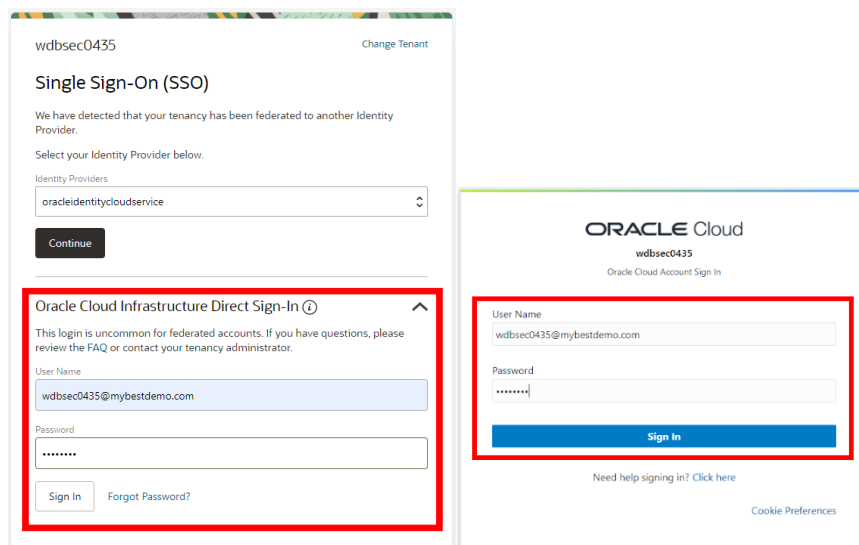


En primer lugar, debe ir a la pantalla de log-in, introducir el nombre de tenant de nuestra cuenta de cloud de Oracle.

OCI URL	https://console.eu-frankfurt-1.oraclecloud.com/
Tenant	Utilice las credenciales proporcionadas
User name	Utilice las credenciales proporcionadas
Password	Utilice las credenciales proporcionadas



Le aparecerá una pantalla para introducir nombre de usuario y contraseña.



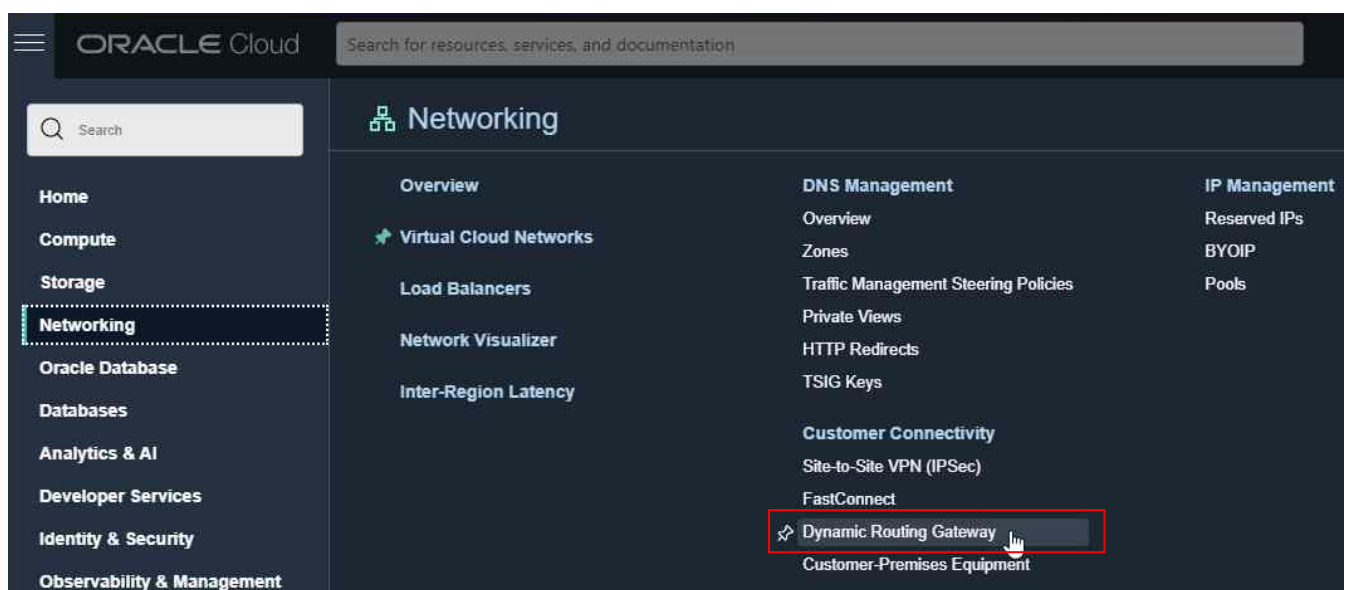
Una vez hecho esto, tendrá acceso al Dashboard de OCI (Oracle Cloud Infrastructure). Lo primero es **acceder a la configuración de Dynamic Routing Gateway**.

Un **Dynamic Routing Gateway**, permite conectar redes desde el cloud de Oracle a otros dispositivos fuera de este cloud, en este caso, utilizaremos esta puerta de enlace para **conectar nuestra red de Oracle Cloud Infrastructure con el router de Equinix**.

Para más información consulte el siguiente enlace a la documentación de Oracle:

<https://docs.cloud.oracle.com/en-us/iaas/Content/Network/Tasks/managingDRGs.htm>

En el menú principal de Oracle Cloud Infrastructure (ícono hamburger), Networking y en la **sección Customer Connectivity** debe seleccionar la **opción Dynamic Routing Gateway**.



Una vez dentro, debe pulsar el botón **Create Dynamic Routing Gateway**.

Customer Connectivity

Site-to-Site VPN (IPSec)

FastConnect

Dynamic Routing Gateway

Customer-Premises Equipment

List Scope

Compartment

atplab

Tag Filters [add](#) | [clear](#)

Dynamic Routing Gateways

Dynamic Routing Gateways (DRG) are optional virtual routers that you can add to your VCN. It provides a path for private network traffic between your

Create Dynamic Routing Gateway

Name	Lifecycle State	Oracle Redundancy Statu
atplabdr	Available	—

Le aparecerá en la parte derecha de la pantalla un paso a paso para crear el Dynamic Routing Gateway.

Seleccione un **compartment** y un **nombre** para esta nueva entidad.

En este caso se introducirán los siguientes datos:

Name	atplabdr
Compartment	atplab

Create Dynamic Routing Gateway [Help](#)

Name

atplabdr

Create in compartment

atplab

wdbscc0432 (root)/atplab

[Hide Advanced Options](#)

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

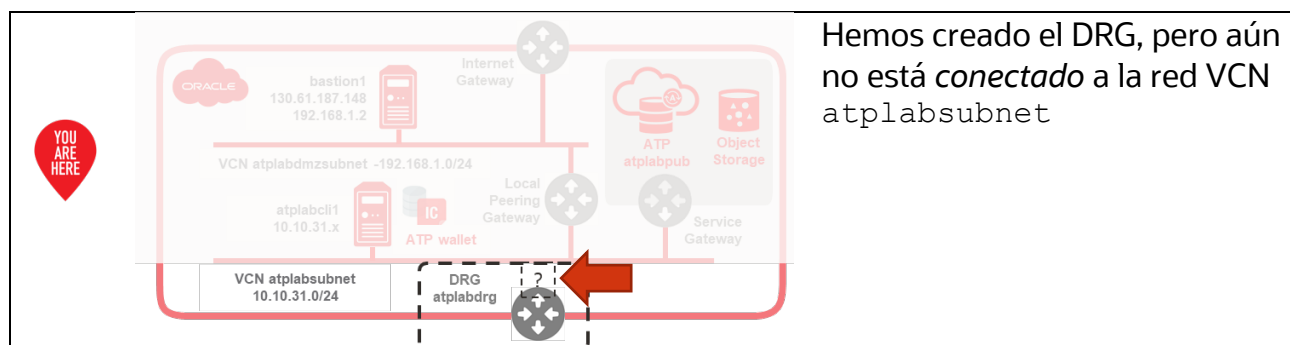
None (add a free-form t...

[+ Additional Tag](#)

[Create Dynamic Routing Gateway](#) [Cancel](#)



Una vez creado, aparecerá el panel principal de Dynamic Routing Gateway. Seleccione el nuevo DRG pulsando sobre su nombre.



A continuación, hay que asociarlo a una red Privada Virtual (VCN). Para ello, vaya a la sección **Virtual Cloud Networks**.

Networking » Dynamic Routing Gateways » atplabdr » Virtual Cloud Networks

atplabdr

[Edit](#) [Add Tags](#) [Move Resource](#) [Terminate](#)

DRG

AVAILABLE

Dynamic Routing Gateway Information

OCID: ...xjbjtbzhna [Show](#) [Copy](#)

Created: Mon, Jan 25, 2021, 5:56:24 PM UTC

Oracle Redundancy Status: —

Virtual Cloud Networks

[Attach to Virtual Cloud Network](#)

Name	Lifecycle State	CIDR Block	Attachment State	Attachment Route Table
No items found in this compartment.				

[Attach to Virtual Cloud Network](#)

Resources

- [IPSec Connections \(0\)](#)
- [Virtual Cloud Networks \(0\)](#)**
- [Virtual Circuits \(0\)](#)
- [Remote Peering Connections \(0\)](#)

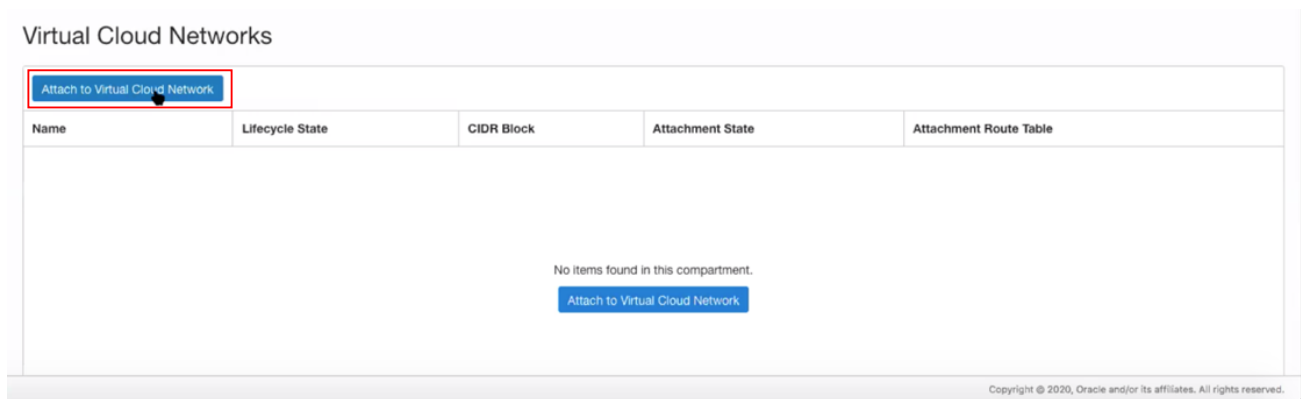
List Scope

COMPARTMENT

atplab

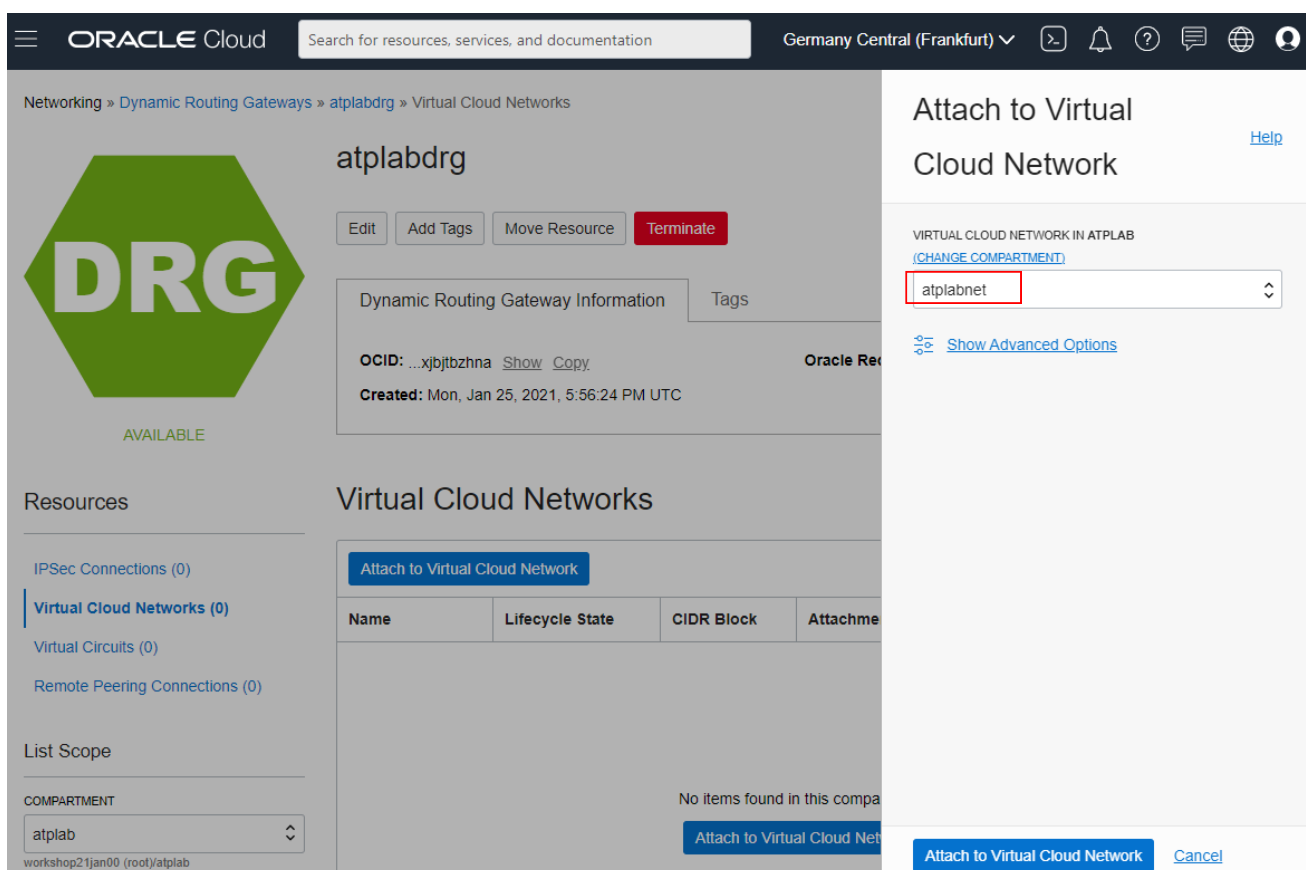
Pulse sobre el botón **Attach to Virtual Cloud Network** para asociar el DRG a la red privada.





Al pulsar en el botón para conectar una red privada virtual, aparecerá un menú de configuración paso a paso en la parte derecha de la pantalla.

En esta ocasión, **seleccione la VCN que se conectará a este Dynamic Routing Gateway -> atplabnet**



Pulse El botón **Attach to Virtual Cloud Network** para continuar.

Una vez hecho esto, podrá ver la red **conectada** a nuestro Gateway.





atplabdrbg

Edit Add Tags Move Resource Terminate

Dynamic Routing Gateway Information Tags

OCID: ...xjbjtbzhna [Show](#) [Copy](#)

Oracle Redundancy Status: —

Created: Mon, Jan 25, 2021, 5:56:24 PM UTC

Resources

IPSec Connections (0)

Virtual Cloud Networks (1)

Virtual Circuits (0)

Remote Peering Connections (0)

List Scope

COMPARTMENT

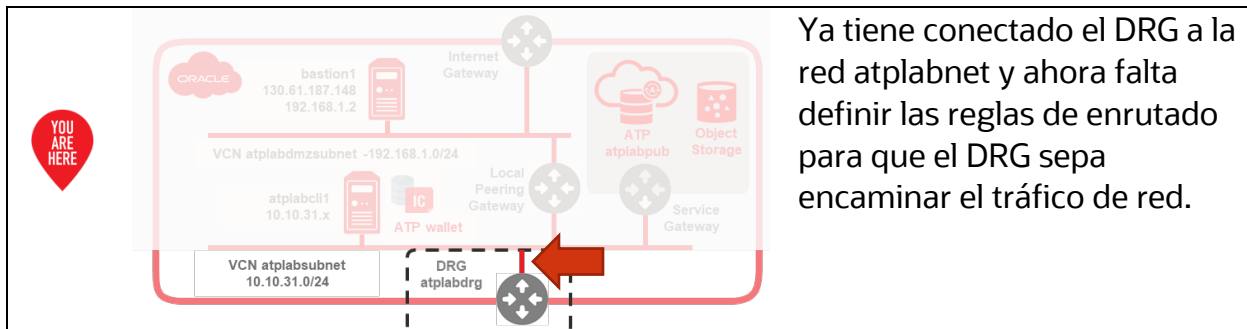
atplab

Virtual Cloud Networks

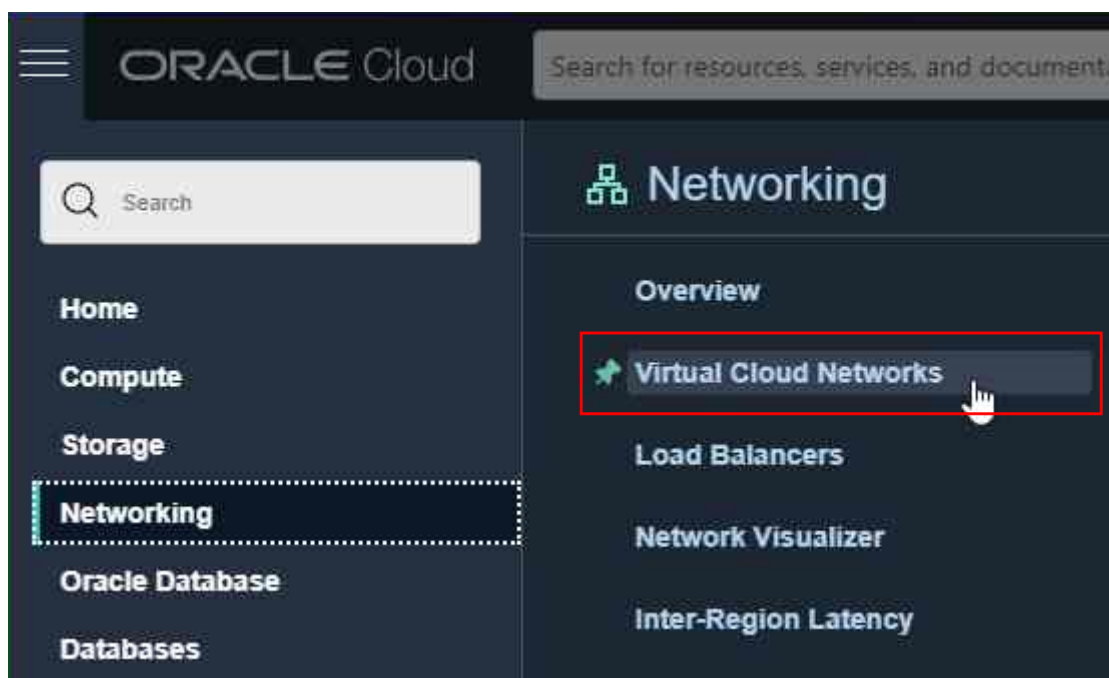
Attach to Virtual Cloud Network

Name	Lifecycle State	CIDR Block	Attachment State	Attachment Route Table
atplabnet	Available	10.10.31.0/24	Attached	—

Showing 1 Item



A continuación, en el menú principal de OCI (icono hamburger), seleccione **Networking** → **Virtual Cloud Networks**



Una vez en la sección de VCNs, seleccione la **red** que ha conectado a la **Dynamic routing Gateway (atplabnet)** y diríjase a la sección **route tables**.

A screenshot of the Oracle Cloud console showing the 'Virtual Cloud Networks in atplab Compartment' page. The left sidebar shows the 'Networking' section with 'Virtual Cloud Networks' selected. The main content area shows a table of VCNs. The first row, 'atplabnet', is highlighted with a red box. The table has columns: Name, State, CIDR Block, Default Route Table, and DNS Domain Name. Below the table, it says 'Showing 2 Items' and '1'.



Resources

Subnets (1)
Route Tables (1)
Internet Gateways (0)
Dynamic Routing Gateways (1)
Network Security Groups (1)

Route Tables in atplab Compartment

Create Route Table

Name	State	Number of Rules	Created
Default Route Table for atplabnet	Available	3	Mon, Oct 26, 2020, 09:42:18 UTC

Showing 1 item < 1 of 1 >

Pulse en el botón **Create Route Table**. En este caso va a crear una ruta desde la red atplab hacia otras nubes.

Cree los campos según la siguiente tabla:

Name	routetablefordrg
Create In Compartment	atplab

Create Route Table
[Help](#)

NAME

routetablefordrg

CREATE IN COMPARTMENT

atplab

Route Rules (Optional)

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.

+ Another Route Rule

[Show Tagging Options](#)

Create

Cancel

Pulse el botón **Create**. Una vez creada la tabla de rutas, seleccionamos **routetablefordrg**.



Resources

Subnets (1)

CIDR Blocks (1)

Route Tables (2)

Internet Gateways (0)

Route Tables *in atplab Compartment*

Create Route Table

Name	State	Number of Rules
routetablefordrg	● Available	0

Presionamos el botón **Add Route Rules** e introducimos los siguientes campos

Target Type	Dynamic routing Gateway
Destination CIDR BLOCK	10.10.33.0/24
Description	To GCP

Resources

Route Rules (0)

Route Rules

Add Route Rules

Edit

Remove

<input type="checkbox"/>	Destination	Target Type	Target
No items found.			
0 Selected			

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

Dynamic Routing Gateway

DESTINATION CIDR BLOCK

10.10.33.0/24

Provide IPv4 or IPv6 address.

TARGET DYNAMIC ROUTING GATEWAY

Name: atplabdr

Compartment: atplab

DESCRIPTION OPTIONAL

To GCP

Maximum 255 characters

+ Additional Route Rule



Pulsar nuevamente el botón **+ Additional Route Rule**, e introducimos los siguientes campos:

Target Type	Dynamic routing Gateway
Destination CIDR BLOCK	10.10.32.0/24
Description	To AWS

TARGET TYPE

Dynamic Routing Gateway

DESTINATION CIDR BLOCK

10.10.32.0/24

Provide IPv4 or IPv6 address.

TARGET DYNAMIC ROUTING GATEWAY

Name: atplabdr

Compartment: atplab

DESCRIPTION OPTIONAL

To AWS

Maximum 255 characters

+ Additional Route Rule

Pulsar nuevamente el botón **+ Additional Route Rule**, e introducimos los siguientes campos:

Target Type	Dynamic routing Gateway
Destination CIDR BLOCK	10.10.34.0/24
Description	To AZURE



Route Rule

TARGET TYPE

Dynamic Routing Gateway

DESTINATION CIDR BLOCK

10.10.34.0/24

Specified IP addresses: 10.10.34.0-10.10.34.255 (256 IP addresses)

TARGET DYNAMIC ROUTING GATEWAY

Name: atplabdrg

Compartment: atplab

DESCRIPTION OPTIONAL

To Azure

Maximum 255 characters

+ Another Route Rule

Add Route Rules

[Cancel](#)

Por último click en el botón **Add Route Rules**.

Y revisamos las rutas recién creadas.





routeablefordrg

[Move Resource](#)
[Add Tags](#)
[Terminate](#)

Route Table Information

Tags

OCID: ...756pxq [Show](#) [Copy](#)

Compartment: atplab

Created: Mon, Jan 25, 2021, 18:07:06 UTC

Resources

Route Rules (3)

Route Rules

[Add Route Rules](#)
[Edit](#)
[Remove](#)

<input type="checkbox"/>	Destination	Target Type	Target	Description	
<input type="checkbox"/>	10.10.32.0/24	Dynamic Routing Gateways	atplabdr	To AWS	⋮
<input type="checkbox"/>	10.10.33.0/24	Dynamic Routing Gateways	atplabdr	to GCP	⋮
<input type="checkbox"/>	10.10.34.0/24	Dynamic Routing Gateways	atplabdr	to azure	⋮

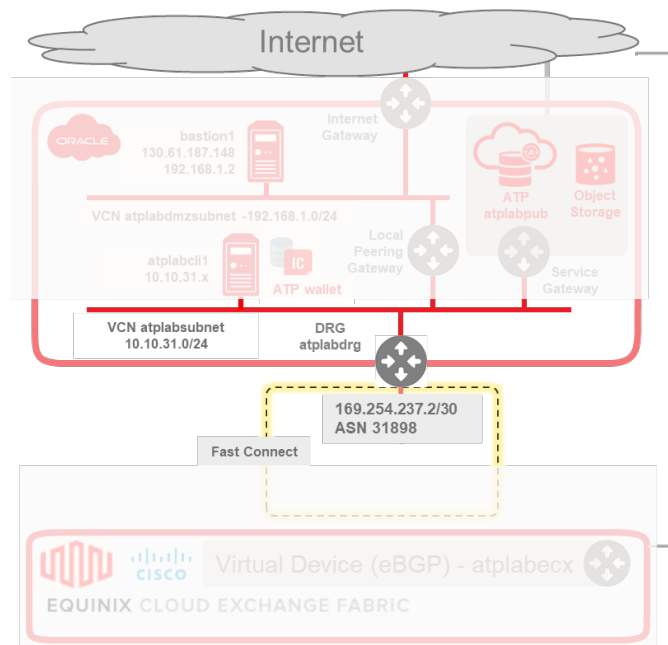
0 Selected Showing 3 Items < 1 of 1 >



Conexión Fast Connect

¿Qué voy a hacer?

Va a crear una conexión fast connect desde OCI a Equinix ECX para poder interconectar en los siguientes laboratorios con el resto de clouds.



Una vez creadas las tablas de rutas hacia las nubes de Google, Amazon y Azure vaya al menú principal de OCI (icono hamburger), y dentro de **Networking**, acceda a la sección **Customer Connectivity** y seleccione **FastConnect**



Pulse el botón **Create FastConnect** para crear una nueva **FastConnect** con nombre: **atplabfc**



ORACLE Cloud Search for resources, services, and documentation Germany Central (Frankfurt) > ? > > > >

Networking

- Overview
- Virtual Cloud Networks
- Dynamic Routing Gateways
- Customer-Premises Equipment
- VPN Connections
- Load Balancers
- FastConnect

FastConnect Connections *in atplab Compartment*

FastConnect is a connection between a customer's on-premises network and Oracle Cloud Infrastructure over a private physical network instead of the internet.

Create FastConnect

Name	Lifecycle State ⓘ	IPv4 BGP State ⓘ	Connection Type ⓘ	Created
No items found.				

Showing 0 Items < Page 1 >

Seleccione el uso de un partner de Oracle, después seleccione **Equinix Fabric** y presione el botón **Next**.

ORACLE Cloud Search for resources, services, and documentation Germany Central (Frankfurt) > ? > > > > >

Create Connection [Help](#)

1 Connection Type
2 Configuration

Connection Type

FastConnect lets you access your existing network from your Virtual Cloud Network (VCN) without traversing the internet. Choose an option:

FastConnect Partner

Use this option if you have a relationship with a FastConnect partner. Here you set up the Oracle side of a virtual circuit that runs on the partner's connection. See the topics to the right.

✓

FastConnect Direct

Use this option if you want a dedicated connection by the way of a third-party network partner or by colocating in a FastConnect POP. Here you request a cross-connect and receive the Letter of Authorization (LOA). After cabling is complete at the POP, you return here to activate the cross-connect and set up at least one virtual circuit. See the topics to the right.

Documentation

- [List of FastConnect Partners](#) ⓘ
- [FastConnect Partner](#) (Setup steps) ⓘ
- [FastConnect Direct: Third-Party Partner](#) (Setup steps) ⓘ
- [FastConnect Direct: Colocate with Oracle](#) (Setup steps) ⓘ

PARTNER

Equinix: Fabric x ↕

Next [Cancel](#)

En el siguiente menú, introduzca los siguientes datos y presione el botón **Create**.

Name (optional)	atplabfc
Compartment	atplab
Dynamic Routing Gateway	atplabdrgr
Virtual Circuit Type	Private Virtual Circuit



Bandwith	1 GBPS
Customer BGP IP Address	169.254.237.1/30
Oracle BGP IP Address	169.254.237.2/30
Customer BGP ASN	64513

Germany Central (Frankfurt) ▾
🔍
🔔
?
💬
🌐

Create Connection Hi

1 Connection Type
2 Configuration

NAME OPTIONAL

COMPARTMENT

workshop2020101401 (root)/atplab

VIRTUAL CIRCUIT TYPE

Private Virtual Circuit
Private IP addresses are advertised (typically RFC 1918). The connection uses a dynamic routing gateway that you attach to our VCN.

Public Virtual Circuit
Oracle Cloud Infrastructure public IP addresses are advertised (for example, for Object Storage). You also provide the public IP prefixes that you want to advertise.

DYNAMIC ROUTING GATEWAY IN ATPLAB [\(CHANGE COMPARTMENT\)](#)

PROVISIONED BANDWIDTH

BGP IP Addresses

CUSTOMER BGP IPV4 ADDRESS

Provide IPv4 Address: Example: 10.0.0.22/30

ORACLE BGP IPV4 ADDRESS OPTIONAL

Provide IPv4 Address: Example: 10.0.0.21/30

CUSTOMER BGP ASN

☐ USE A BGP MD5 AUTHENTICATION KEY OPTIONAL
Provide a key only if your system requires MD5 authentication.

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

+ Additional Tag

Previous

Create


Cancel

Espere que se provisione su **FastConnect** unos minutos hasta que aparezca el estado **Pending Partner**



ORACLE Cloud Search for resources, services, and documentation Germany Central (Frankfurt)

Networking » FastConnect » Connection Detail



PENDING PARTNER

Connection Created

What's next?

Copy the OCID and give it to the partner to provision the virtual circuit from their end. When BGP State changes to UP, the virtual circuit is ready to test.

OCID: ...47ph5a [Show](#) [Copy](#)

Partner Portal: [Equinix](#)

[Close](#)

atplabfc

[Edit](#) [Move Resource](#) [Add Tags](#) [Delete](#)

Virtual Circuit Information BGP Information Tags

Lifecycle State: Pending Partner

IPv4 BGP State: Down

Partner Name: Equinix

Connection Type: Partner

Virtual Circuit Type: Private

Provisioned Bandwidth: 1 Gbps

Created: Mon, Jan 25, 2021, 18:18:40 UTC

BGP MD5 Authentication: Not Enabled

OCID: ...47ph5a [Show](#) [Copy](#)

Dynamic Routing Gateway: [atplabdrgr](#)

La conexión de FastConnect de OCI **no estará activa** hasta que no se haya configurado desde el lado de Equinix en el virtual Router.



A continuación, seleccione su virtual router creado previamente [atpblabecx]

Inventory 0 Active Connections

Set Port Bandwidth Threshold Alert Create Connection

Connections Ports **Virtual Devices** Routing Instances Connectors Subscriptions IP Blocks

Virtual Devices Create Virtual Device

Filter by: Enter a virtual device name Location Virtual Device Status Hide Draft Devices

Reset Filters

Device Status	Device Type	Virtual Device Name	License Status	Vendor	Model	Location	Last Modified
Up	Router	Atpblabecx	Registered	Cisco	CSR 1000V	Frankfurt	Oct 26 2020 13:50 GMT

Seleccione el botón **Crear conexión** y, en la sección de conexiones frecuentes, seleccione la conexión de Oracle Cloud.

Equinix FABRIC Explore Welcome, workshop21jan00

Connections Network Edge Ports Inventory My Company Administration Support

You are currently in trial mode. If you're satisfied, select Finish Trial and Sign Up. If you still need some more time, you can renew for another 15 days. Renew Trial Finish Trial and Sign Up

Your Virtual Device









Atpblabecx
Frankfurt | Zone 1
Cisco | CSR 1000V | Router

Learn More Connect to a Network Service **Create Connection**

Seleccione la **conexión de Oracle Cloud**





Frequent Connections

 <p>Alibaba Cloud</p> <p>6 Locations 1 Services</p> <p>Select</p>	 <p>Amazon Web Services</p> <p>29 Locations 4 Services</p> <p>Select</p>	 <p>Google Cloud Platform</p> <p>25 Locations 3 Services</p> <p>Select</p>	 <p>IBM Cloud</p> <p>16 Locations 2 Services</p> <p>Select</p>
 <p>Microsoft Azure</p> <p>30 Locations 2 Services</p> <p>Select</p>	 <p>Oracle Cloud</p> <p>16 Locations 4 Services</p> <p>Select</p>	 <p>Equinix Metal</p> <p>5 Locations 2 Services</p> <p>Select</p>	 <p>Salesforce</p> <p>8 Locations 1 Services</p> <p>Select</p>

Seleccione el tipo de conexión asociado a **Oracle Cloud Infrastructure -OCI- FastConnect**, la primera.

ORACLE

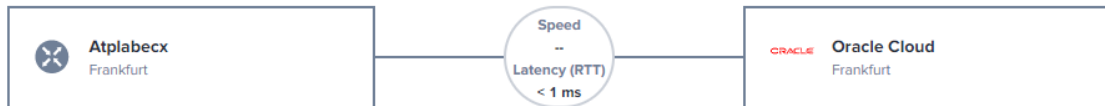
Show: ☒ Services available to me ☐ All services

<p> Oracle Cloud Infrastructure -OCI- FastConnect</p> <p>Description</p> <p>Layer 2</p> <p>Regions</p> <p>AMER APAC EMEA</p> <p>Available Locations</p> <p>Available from remote locations ✓</p> <p>Silicon Valley Osaka Tokyo Sydney Frankfurt Amsterdam Zurich Los Angeles London Melbourne Sao Paulo Toronto Ashburn</p> <p>Create Connection</p>	<p> Oracle Cloud Infrastructure Classic FastConnect</p> <p>Description</p> <p>Oracle FastConnect greatly simplifies and streamlines how you access your Oracle Public Cloud services by establishing dedicated connectivity from your corporate networks or datacenters into Oracle Public Cloud.</p> <p>Layer 3</p> <p>Regions</p> <p>EMEA AMER</p> <p>Available Locations</p> <p>Available from remote locations ✓</p> <p>Amsterdam Ashburn Chicago London</p> <p>Create Connection</p>
---	--

A continuación, seleccione la región de Frankfurt tanto en el origen como en el destino, seleccione también el dispositivo virtual que ha creado



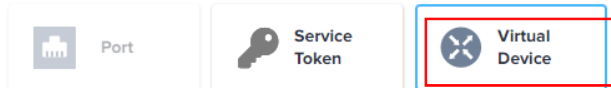
Preview



Origin

Locations with ports or Virtual Devices

Connect Using

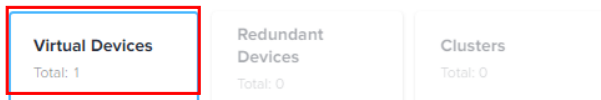


EMEA 1

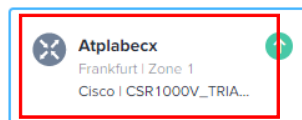
Select Location



Select Virtual Device Type



Virtual Devices in Frankfurt:

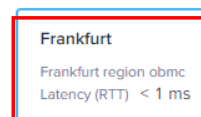


Destination

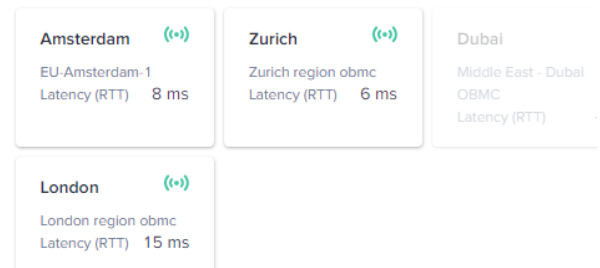
Oracle Public Cloud Group (SE3 Cage 60210) locations you can connect with

AMER 5 EMEA 3 APAC 5

Suggested:



Remote:



Pulse en el botón **Next** e introduzca el **OCID del FastConnect de Oracle Cloud Infrastructure**, lo puede obtener desde la pantalla principal de **virtual cloud networks** dentro de **FastConnect** en la consola de OCI.



☰

ORACLE Cloud


Search for resources, services, and documentation

Germany Central (Frankfurt) ▾

🔍

🔔

Networking » FastConnect » Connection Detail



PENDING PARTNER

atplabfc

Edit

Move Resource

Add Tags

Delete

Virtual Circuit Information

BGP Information

Tags

Lifecycle State: ● Pending Partner

Partner Name: Equinix

Virtual Circuit Type: Private

Created: Mon, Oct 26, 2020, 13:58:43 UTC

OCID: ocid1.virtualcircuit.oc1.eu-frankfurt-1.aaaaaaafxhe3gbqjd
nzbkr74lxzrpegsg6rxeggczeiw2xdrfpys2po5q

Hide

Copy

IPv4 BGP State: Down

Connection Type: Partner

Provisioned Bandwidth: 1 Gbps

BGP MD5 Authentication: Not Enabled

Dynamic Routing Gateway: [atplabdr](#)

A continuación, en la pantalla de Equinix, en el paso a paso para crear una conexión con OCI, introduzca lo siguiente:

Fast Connect Virtual Circuit	Atplab-toOCI
Virtual Circuit OCID	OCID of your FastConnect


✓ Select Locations

● Connection Details

Review

Connection Details


Preview



Atplabex
Frankfurt

Speed
1 Gbps

Latency (RTT)
< 1 ms



Oracle Cloud
Frankfurt

Connection Information

FastConnect Virtual Circuit

Atplab-toOCI

Virtual Circuit OCID

ocid1.virtualcircuit.oc1.eu-frankfurt-1.aaaaaaafxhe3gbqjd
nzbkr74lxzrpegsg6rxeggczeiw2xdrfpys2po5q

✓

Interface Selection

This interface will be reserved for all incoming Connections to this device. It will not be available to create Connections to any other service provider.

☒ Automatically select the next available interface on my device(s)

☐ I will select the interface on my device

Purchase Order Number

Optional

The purchase order number will be included in the order confirmation email

e.g. PO1544555



No hace falta introducir **Purchase Order**. Pase a la siguiente pantalla pulsando el botón **Next**, seleccione el ancho de banda contratado, continúe

Connection Speed

Billing Tier Up to 1 Gbps	1 Gbps
Speed Selected	Monthly Charge 150.00 EUR

Pricing Overview

Local Connection:	150.00 EUR
Remote Surcharge:	0.00 EUR
Total:	150.00 EUR

Additional taxes and/or fees may apply, depending on the Metro.

[Download Design Summary](#)

[Previous](#) [Next](#)

Finalmente repase todos los datos introducidos, introduzca un correo para recibir notificaciones y confirme.

Preview

Atplabecx Frankfurt — Speed 1 Gbps, Latency (RTT) < 1 ms — Oracle Cloud Frankfurt

Connection Summary

Connection Name	Atplab-to-OCI
Virtual Device Name	Atplabecx
Speed	1 Gbps
Billing Tier	Up to 1 Gbps
Purchase Order Number	-
Virtual Circuit OCID	ocid1.virtualcircuit.oc1.eu-frankfurt-1.aaaaaaaoby6qcatlfmqwg77m6hj7pnzhu6qsnz3dn6i2a2gg7wluf47ph5a
Average last month latency	< 1 ms

Pricing Overview

Local Connection	150.00 EUR
Remote Connection	0.00 EUR
Total	150.00 EUR

Additional taxes and/or fees may apply.

Notifications 1 Recipient(s)

Enter email address(es) that will receive notifications about this connection:

[Add Another Email](#)

[Download Design Summary](#)

[Previous](#) [Submit Order](#)



Puede ver en la consola principal la nueva conexión recién creada.

The screenshot shows the Oracle Cloud console interface. At the top, there's a navigation bar with tabs like 'Connections', 'Network Edge', 'Ports', 'Inventory', 'My Company', 'Administration', and 'Support'. A 'Create Connection' button is in the top right. Below this, the 'Inventory' section is displayed with a large '0' indicating 'Active Connections'. A 'Set Port Bandwidth Threshold Alert' button and another 'Create Connection' button are also visible. The main content area shows the 'Connections' tab selected. It includes filters for 'Show: Outgoing Connections', 'Incoming Connections', 'Remote Connections Only', and 'Service Token Connections Only'. There are search fields for 'Search Connections', 'Search Service Key', 'Search Ports by Name', and dropdowns for 'Location', 'Provider Status', and 'Status'. A 'Reset Filters' link is present. A single connection, 'Atplab-toOCI', is listed and highlighted with a red box. It shows a green checkmark, indicating it's active. The connection details include 'Frankfurt Origin' and 'Oracle Cloud Infrastructure -OCI- FastConnect (eu-frankfurt-1) Destination'.

Vuelva a seleccionar Network Edge, View Virtual Device y seleccione su virtual device. A continuación, seleccione Connections para ver la conexión con OCI y poder configurarla desde el lado de Equinix.

This screenshot is a closer view of the 'Connections' page. It shows the same filters and search fields as the previous image. The connection 'atplab-toOCI' is highlighted with a red box. It has a green checkmark and shows 'Frankfurt Origin' and 'Oracle Cloud Infrastructure -OCI- FastConnect (Frankfurt region obmcj) Destination'.

Si **selecciona la conexión al cloud de Oracle**, puede ver los detalles, y puede ver que la conexión esta provisionada.



Atplab-toOCI

Atplab-toOCI

Frankfurt Atplabecx Origin

Oracle Cloud Infrastructure -OCI- FastConnect (eu-frankfurt-1) Destination

Atplabecx Virtual Device

Oracle Cloud Infrastructure -OCI- FastConnect
Oracle Public Cloud Group (SE3 Cage 60210) | eu-frankfurt-1

Refresh Connection Status

Primary Connection Overview

Edit

Name	Atplab-toOCI
Unique ID	bdb461e1-da67-4ae2-bba4-c5c53c45c86d
Virtual Device Name	Atplabecx
Virtual Device UUID	c16fc455-50f5-4862-9f49-9a24c1ebf5b4
Status	Provisioned
Provider Status	Provisioning
Seller-Side Port Name	ORACLE-DEUTSCHLAND-BV-FR4-ECX-PRI-01
Seller-Side VLAN ID	528
Authentication Key	ocid1.virtualcircuit.oc1.eu-frankfurt-1.aaaaaaafxhe3gbqjdnzbr74lxzrpegs6rxeggczeiw2xdrtrpys2po5q
Average Last Month Latency	< 1 ms
Seller-Side Region	eu-frankfurt-1

Bandwidth Details

Connection Speed	1 Gbps
Billing Tier	Up to 1 G

Ahora quedaría hacer efectiva la conexión punto a punto entre Oracle Cloud Infrastructure y Equinix.

Para ello hay que proporcionar los siguientes detalles dentro de Equinix, que se pueden obtener desde el Cloud de Oracle.

Los campos están disponibles al final del formulario de la consola de Equinix, seguramente tendrá que hacer un *scroll-down* de la pantalla hasta que aparezca dicho formulario.



Primary BGP Information [Learn More](#)

Local ASN	Enter Local ASN
Local IP Address	Enter the local IP address
Remote ASN i	Enter Remote ASN
Remote IP address	Enter Remote IP Address
BGP Authentication Key	Enter the BGP Authentication Key

Accept

Sitúese **dentro del FastConnect** que hemos creado dentro **de Oracle Cloud Infrastructure**, y vaya a la pestaña **BGP Information**. Ahí puede ver los parámetros requeridos desde Equinix.

ORACLE Cloud Search for resources, services, and documentation Germany Central (Frankfurt) >

Networking » FastConnect » Connection Detail

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Edit Move Resource Add Tags Delete

Virtual Circuit Information BGP Information Tags


Customer BGP ASN: 64513
Oracle BGP ASN: 31898

Customer BGP IPv4 Address: 169.254.237.1/30
Oracle BGP IPv4 Address: 169.254.237.2/30

Introduzca estos datos en la conexión de Oracle dentro de Equinix. Hay que tener en cuenta que la introducir *Remote IP address* solo hay que poner la IP sin la máscara de red.




Primary BGP Information [Learn More](#)

Local ASN	64513	✓
Local IP Address	169.254.237.1/30	✓
Remote ASN 	31898	✓
Remote IP address	169.254.237.2	✓
BGP Authentication Key	Enter the BGP Authentication Key	

[Accept](#)

Una vez introducidos los datos, compruebe si la conexión se realiza desde el lado de Oracle, inicialmente estará en estado del ciclo de vida “provisioning” y BGP state “Down”



PROVISIONED

atplabfc

[Edit](#) [Move Resource](#) [Add Tags](#) [Delete](#)

Virtual Circuit Information BGP Information Tags

Lifecycle State: ● Provisioned

Partner Name: Equinix

Virtual Circuit Type: Private

Created: Mon, Oct 26, 2020, 13:58:43 UTC

OCID: ocid1.virtualcircuit.oc1.eu-frankfurt-1.aaaaaaafxhe3gbqjd nzbkr74lxzrpegsg6rxeggczeiw2xdlrpys2po5q [Hide](#)
[Copy](#)

IPv4 BGP State: Down

Connection Type: Partner


Provisioned Bandwidth: 1 Gbps

BGP MD5 Authentication: Not Enabled

Dynamic Routing Gateway: [atplabdrq](#)

Desde el lado de Equinix, el estado de aprovisionamiento aparecerá como “PROVISIONING”, espere unos minutos.

Primary BGP Information [Learn More](#) [Edit](#)

Local ASN	64513
Local IP Address	169.254.237.1/30
Remote ASN 	31898
Remote IP address	169.254.237.2
BGP Authentication Key	-
Provisioning Status	Provisioning



Espere a que el estado cambie a “PROVISIONED”

Primary BGP Information Learn More		Edit
Local ASN	64513	
Local IP Address	169.254.237.1/30	
Remote ASN i	31898	
Remote IP address	169.254.237.2	
BGP Authentication Key	-	
Provisioning Status	Provisioned	

Ahora puede ir al cloud de Oracle y ver que el estado del ciclo de vida es **provisioned** también

Espere hasta que el **Estado de BGP** sea “UP”

Networking » [FastConnect](#) » Connection Detail

VC
PROVISIONED

Warning: This FastConnect has only a single virtual circuit. Oracle recommends having redundant connections for high availability. [Learn how to fix the problem](#)

atplabfc

Edit Move Resource Add Tags Delete

Virtual Circuit Information BGP Information Tags

Lifecycle State: ● Provisioned

IPv4 BGP State: ● Up

Partner Name: Equinix

Connection Type: Partner

Virtual Circuit Type: Private

Provisioned Bandwidth: 1 Gbps

Created: Mon, Jan 25, 2021, 18:18:40 UTC

BGP MD5 Authentication: Not Enabled

OCID: ...47ph5a [Show](#) [Copy](#)


Dynamic Routing Gateway: [atplabdrq](#)

Una vez esto ocurra, podrá ver en **Equinix** también los estados de provisionamiento y BGP como “PROVISIONED” y “Established”



Primary BGP Information [Learn More](#)

[Edit](#)

Local ASN	64513
Local IP Address	169.254.237.1/30
Remote ASN 	31898
Remote IP address	169.254.237.2
BGP Authentication Key	-
Provisioning Status	Provisioned
BGP State	Established



Resumen del Lab.

1. Ha configurado el dispositivo **Cisco en Equinix** para poder configurar la conexión con OCI.
2. Ha configurado rutas de acceso en el **DRG de OCI**
3. Ha creado y configurado una conexión **Fast Connect en OCI**
4. Ha creado la conexión desde **OCI a Equinix**

