consoleconnect

Connect to
IBM Cloud

Purpose _

This document describes the prerequisites and procedure needed to create a L2 Connection to IBM Cloud through the Console Connect web portal.

This document will guide you step-by-step to:

1. Provision L2 Connect on **Console Connect**

2. Accept the Direct Link in the **IBM Cloud Portal**

3. Configure BGP from your router to the IBM virtual router. For additional information on this, please refer to the **IBM documentation**

Who is it for _

Console Connect Users

Product Managers

Product Owners

Introduction

The IBM Cloud Direct Link Connect solution lets customers leverage a network service provider (NSP) to deliver connectivity to IBM Cloud locations. This offering typically provides connectivity at a reduced cost because the physical connectivity from IBM Cloud to the Network Service Provider is already in place and shared among other customers.

Create an IBM Cloud Connection

Prerequisites

Before creating an IBM Cloud connection, you will need to meet the following requirements:

1. An IBM Cloud Account. If you do not have one, **apply here**

2. A Console Connect account. If you do not have one, **apply here**

3. IBM Cloud account setup to use a VRF - You can **apply here**

4. At least one active Console Connect Port - PAYG or Plan

5. Decide on whether you are using Direct Link Classic or Direct Link "2.0"
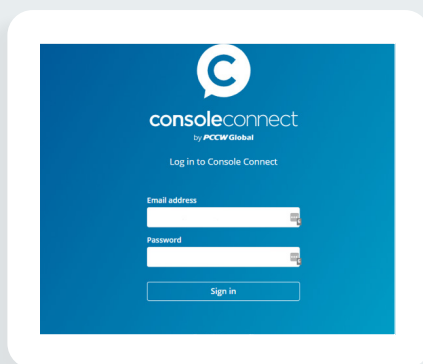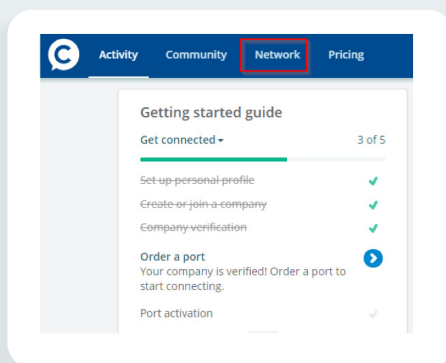
Procedure —
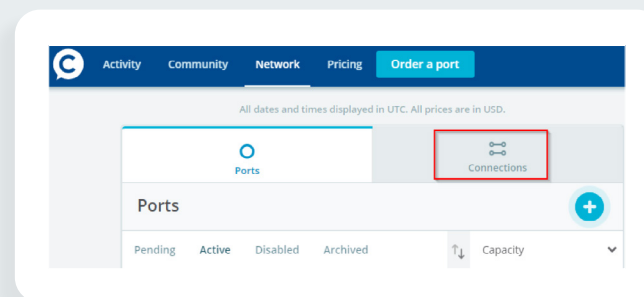
Step 1

Establish a connection on Console Connec

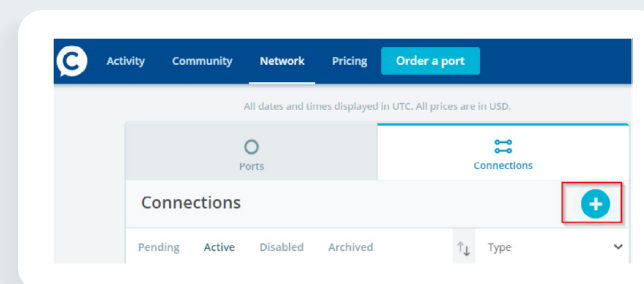**1** Log in to '**Console Connect**'.

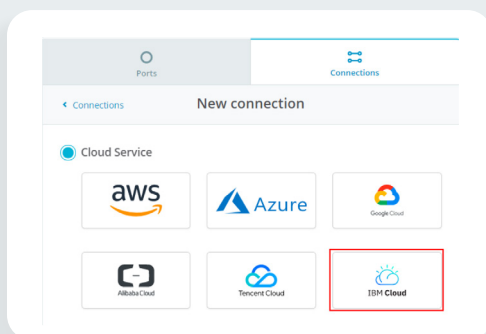**2** Click on '**Network**' tab in the main navigation at the top of the screen.

3 Click on '**Connections**'.

4 Click on the '**+**' (plus) circular button.
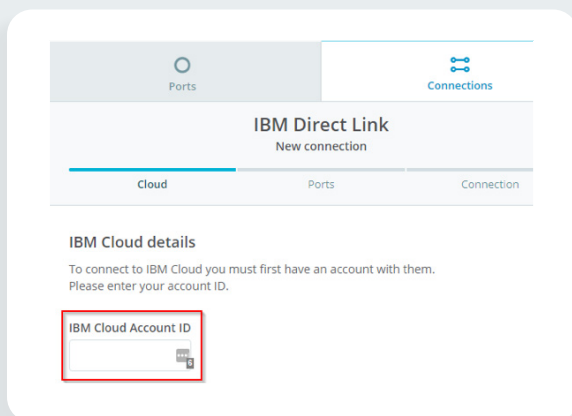
consoleconnect

5 On the new connections page, you will see options to create connections with multiple cloud services. Click 'IBM Cloud'.

6 Enter your IBM Cloud Account ID. If you do not have an account ID, refer to the prerequisites section in this document on how you can obtain an account ID.
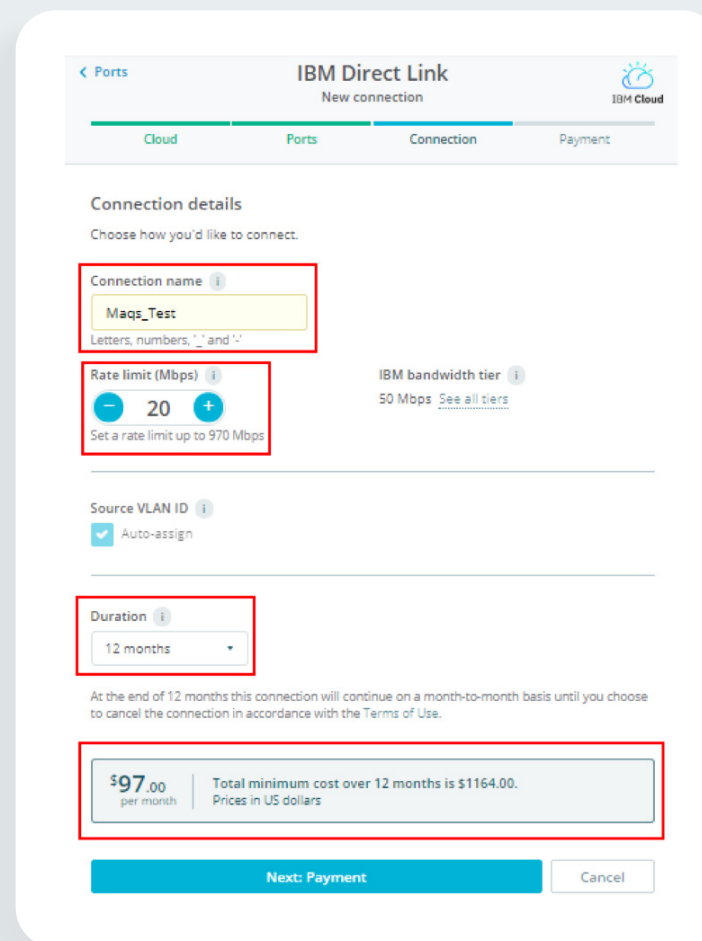

7 Select a PAYG source port and an Interconnect destination from the drop down lists.
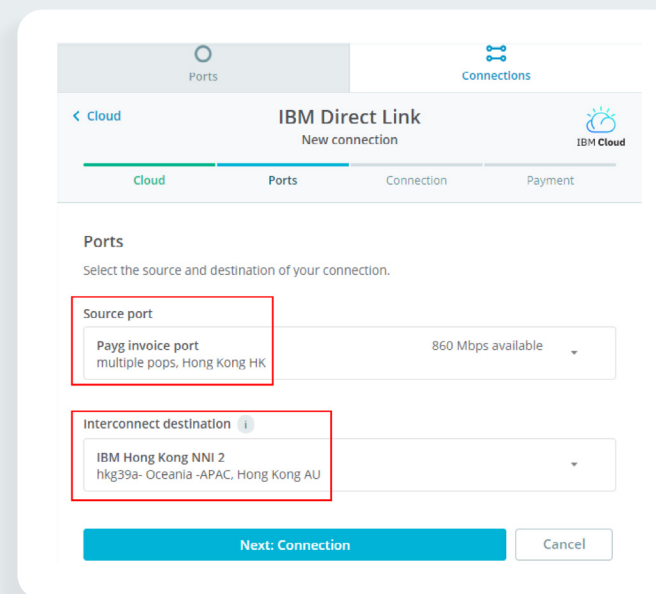
8 Enter your desired connection name. Select a rate limit based on what your port can support. Select PAYG as this allows you to pay as you go and gives you more flexibility to support ever-changing requirements. You also have the option to choose a plan. VLAN ID will be auto-assigned to. You can select the duration for which you would like the connection. Based on the connection duration, the prices is calculated and displayed for you to review before proceeding to the next step.

Note: The connection name needs to conform to validation rules. If not, you will see an error message prompting you to make required changes. The naming convention can be found in the FAQ section of this document.

Note: Once your duration ends (after 12 months in the above example) your connection will automatically switch to month-to-month. This gives you flexibility to review and update your contract based on your requirements. Refer to Terms & Conditions for more information.
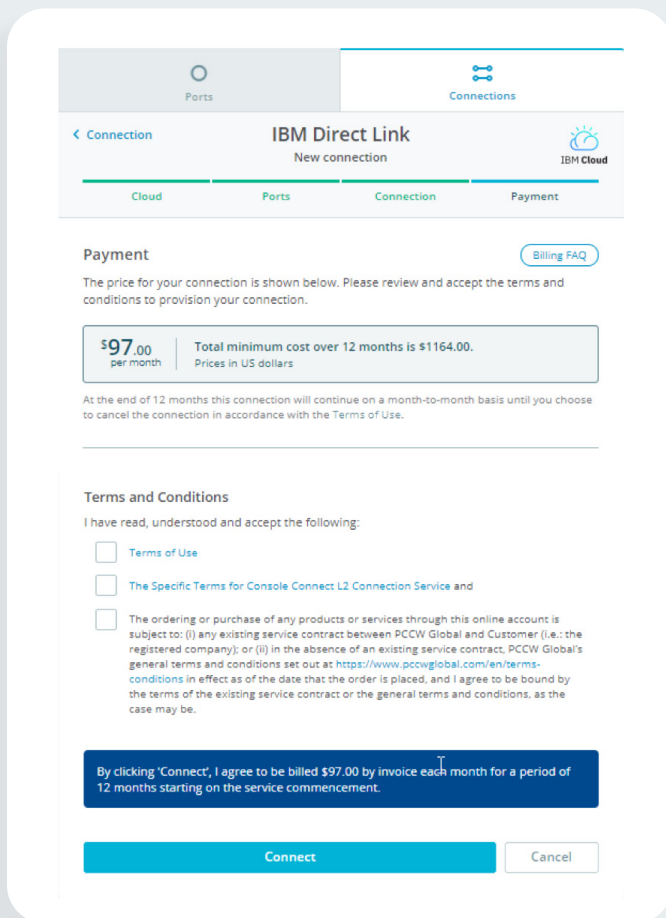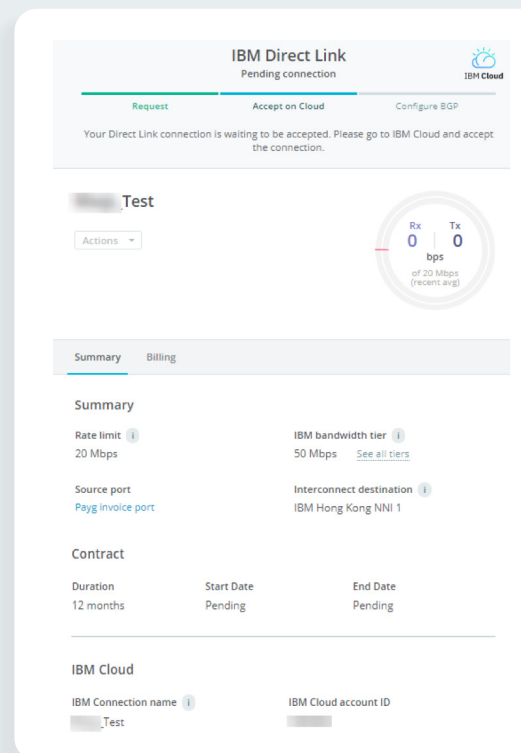
9 When you click the '**Next: Payment**' button, you will be directed to the payment page. The price per month and total cost over the selected duration will be displayed.

10 Accept the Terms and Conditions and click the '**Connect**' button. You will be directed to the Pending connection screen on which a summary of the details of your connection are displayed.

This is the first stage of creating the connection so it is extremely important that you navigate to the IBM Cloud Portal and accept the connection. If you do not accept the connection on the IBM Cloud Portal, your connection will not be established.

Step 2

Accepting on IBM Cloud Portal

Once you have completed the above steps and sent a request to IBM Cloud you need to '**Accept**' the request on IBM Cloud to activate the connection. Follow the steps below:

1 Go to IBM Cloud and enter your IBM ID and click '**Continue**'.
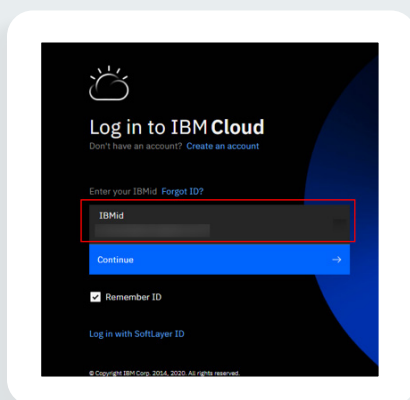
2 Enter your password and click '**Log in**'.
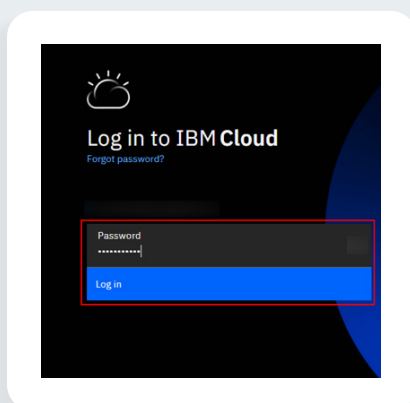
3 Click on the navigation menu in the top left corner.
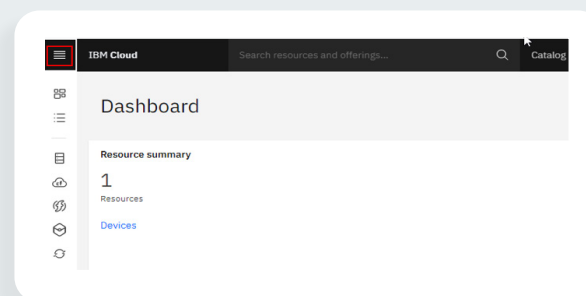
4 Click on '**Classic Infrastructure**', then '**Direct Link**', then '**Connect**'.
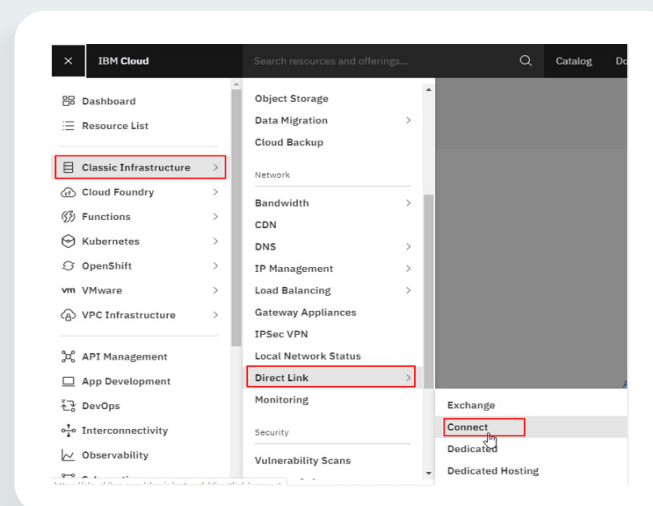
5 You will be directed to a page that lists any connections you have created. In this list you will find your connection and the following details will be displayed:

- Connection name
- Location
- Connection status
- Link speed
- Network provider
- Actions

Click on the '**Actions**' button. You will have the option to Accept or Reject a connection. Clicking '**Accept**' for the connection to be provisioned on Console Connect. If you click '**Reject**' then Console Connect will not provision the connection.

For the purpose of this section of the document, click '**Accept**'.
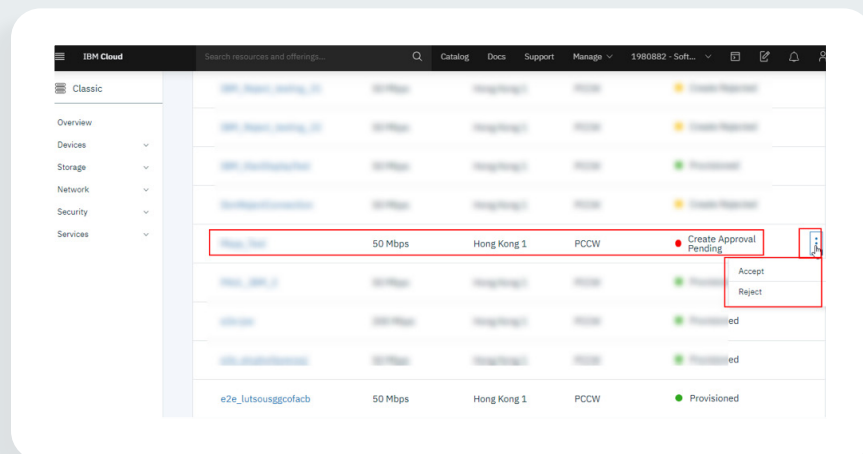
6 You will be directed to IBM Cloud's terms and conditions page. Review your connection details, accept the terms and conditions and then click the '**Create**' button. When you click '**Create**', the connection process will begin.
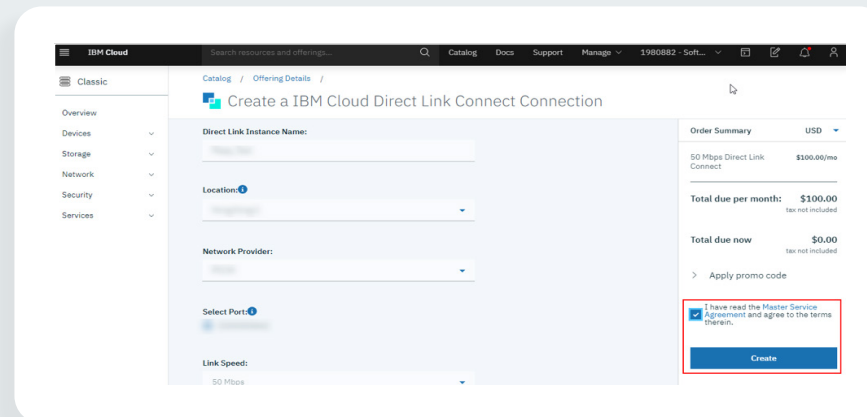
7 After completing the above steps, you will see the following screen which informs you that the connection is being created.
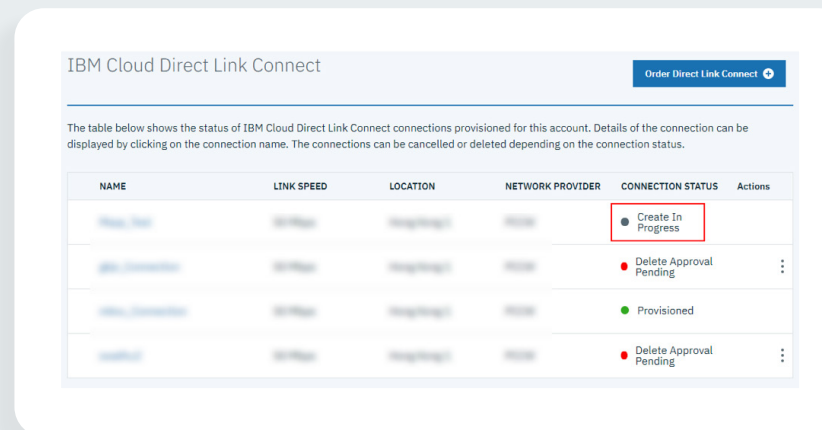
8 Go back to '**Console Connect**'. Generally it takes around two minutes for the connection to become Active.

9 There are four tabs on the Connection screen that display connections according to their status:

- **Pending**: Once you create a connection in Console, you can find the connection in Pending state and will be displayed under the Pending tab until it's accepted on IBM Cloud. After you accepted it on IBM Cloud, the connection will move from pending tab to Active tab (after a couple of minutes).
- **Active**: All your Active connections.
- **Disabled**: All connections that have been disabled. If a connection is enabled, it will move back to the Active tab.
- **Archived**: All connections that have been deleted.

Click on the '**Active**' tab. You will see the connection that you have created.
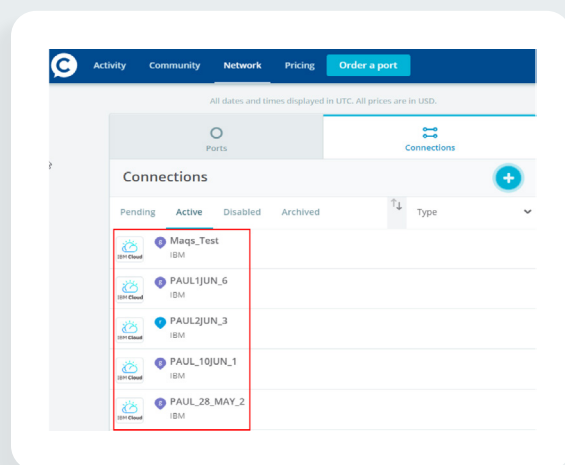
10 To see more information about your connection, click on that connection and you will be directed to the '**Connection Details**' page.
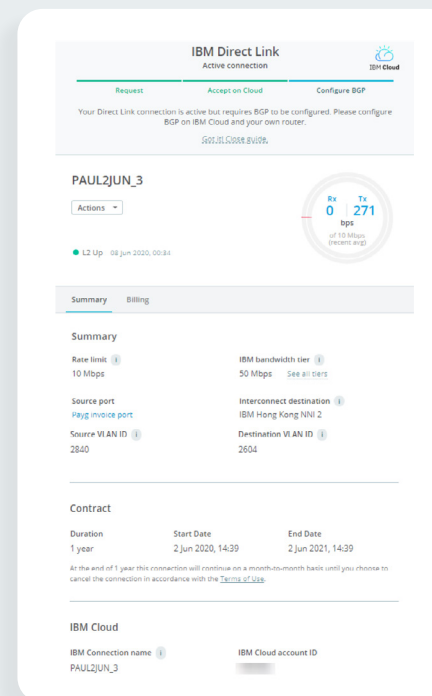
As shown in the above image, on the connection details page, you will be able to see important information such as:

- Layer 2 status
- VLAN ID
  i. Source
  ii. Destination
- Connection name
- Contract details

Step 3

Delete an IBM Connection

Console connect also allows the user to delete an active IBM connection. The steps below outline the process to delete an IBM connection.

1 Click on an active connection that you want to delete.
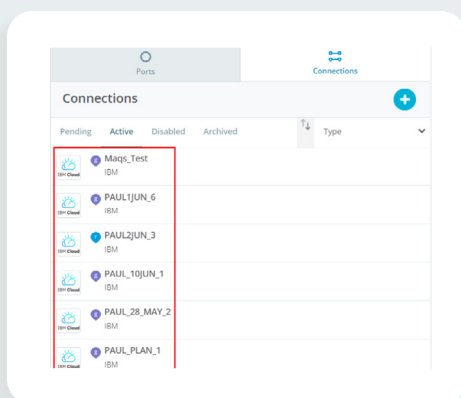
2 It will take you to the connection details page and you will see an '**Actions**' drop down list. Click on that and select '**Delete**'.
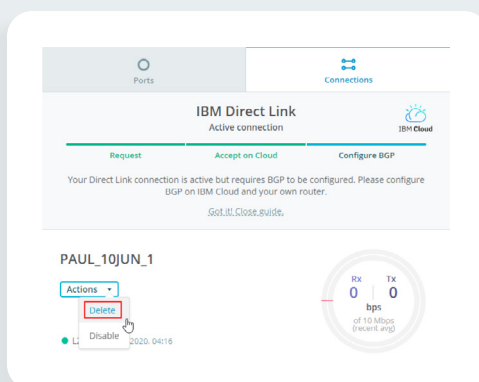
3 You will be presented with a message that asks you to confirm if you want to go ahead and delete your IBM connection. Click '**Yes, delete the connection**'.
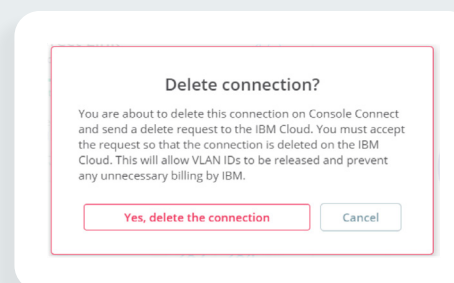
4 You will see that your connection is being deleted. It is important to reiterate that you will need to accept the delete request on IBM Cloud to ensure the deletion process is completed and there's no billing impact.
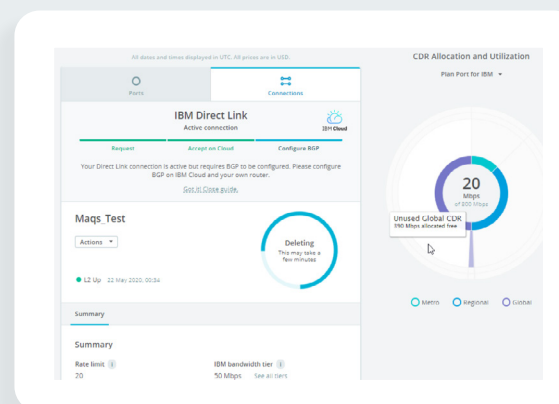
5 Go to IBM Cloud Portal and accept the delete request. You can follow the same steps as per the connection process to find your connection pending acceptance to delete.
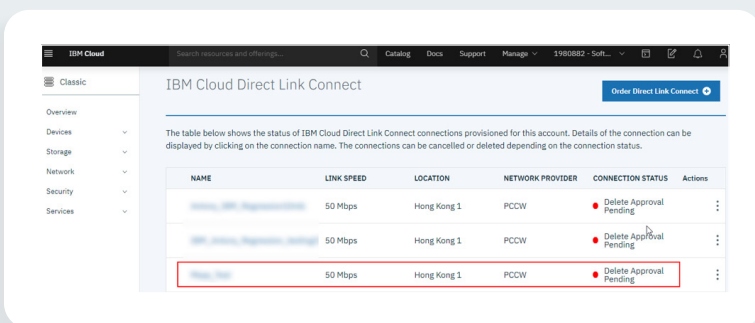
6 Click '**Accept**'.
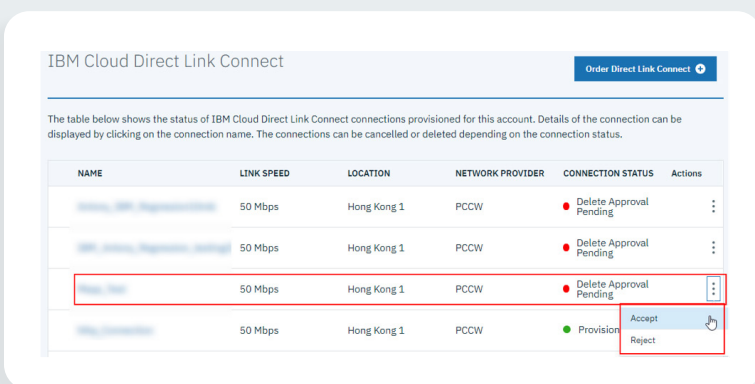
7 Once you click '**Accept**', return back to Console Connect. Depending on the speed at that time between different layers, the process could take anywhere between 60 seconds to a couple of minutes for the connection to be deleted.

8 Once the connection has been deleted, Console Connect will refresh and you will be directed to the '**Archive**' connection list. The archive connection list displays all the connections that have been deleted. In this list you will find your most recently deleted connection.

9 You will also see a message displayed in a banner at the top of the screen stating that your connection has been deleted. It also reminds you to ensure the connection has been deleted on the IBM Cloud portal.
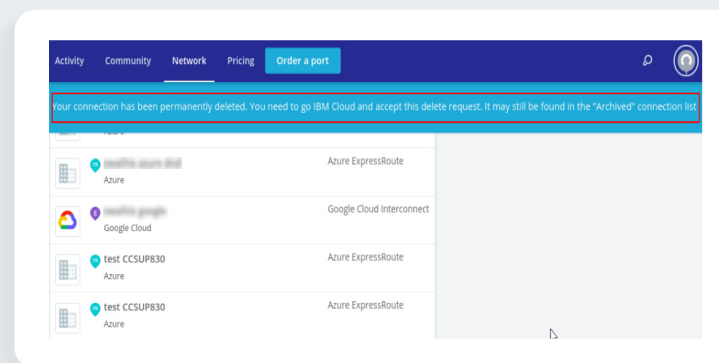
Step 4

Disabling and enabling an IBM connection

Console Connect also allows you to disable and enable an active IBM connection. Follow the steps below to disable an IBM connection.

1 Click on an active connection that you want to delete.
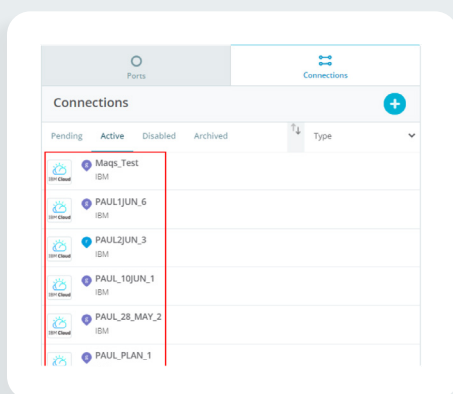
**2** It will take you to the connection details page. Click on the '**Actions**' drop down list and select '**Disable**'.
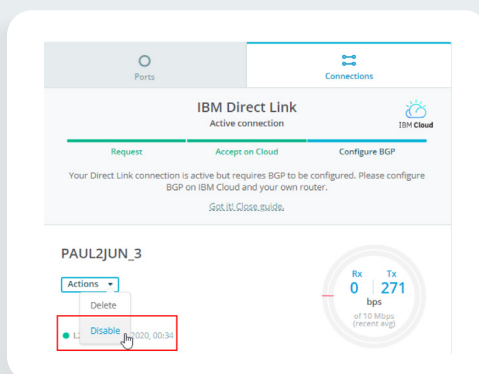
**3** You will be presented with a message that asks you to confirm if you want to disable your IBM connection. Click '**Yes, disable the connection**'.
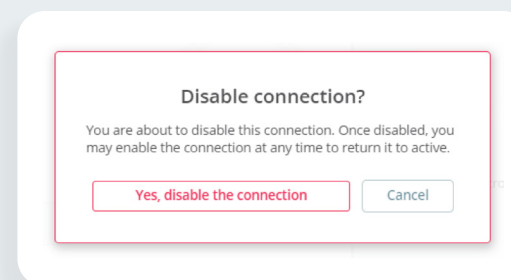

4 You will see that your connection is being disabled.
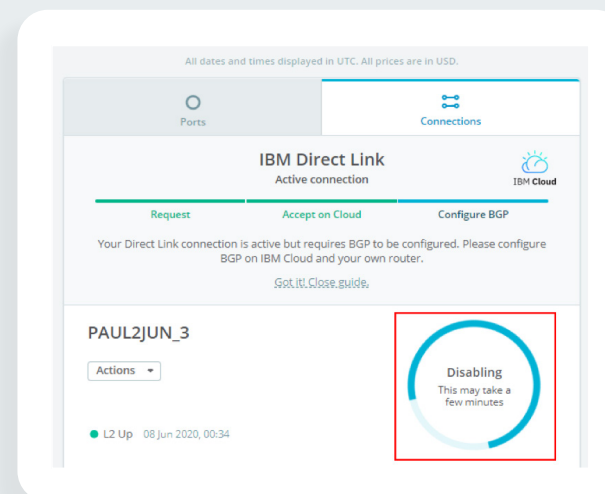
5 Once the connection has been disabled, you will see a banner at the top of the screen stating that the connection is now disabled. You will see '**Disabled connection**' beneath the connection type highlighted in red text that confirms the connection is now disabled
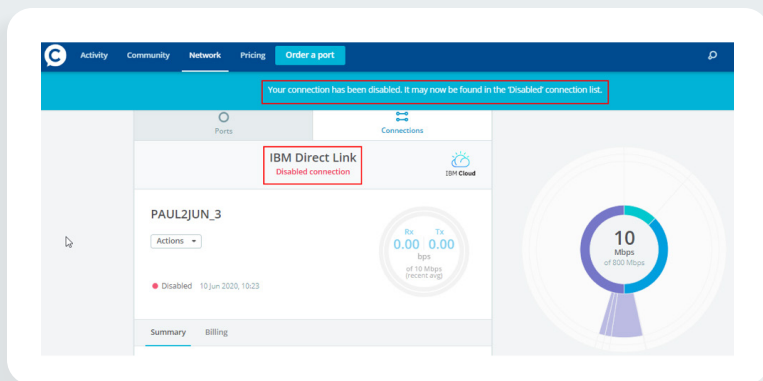
6 If you click on '**Connections**' and then click on the '**Disabled**' tab, you will find your disabled connection.
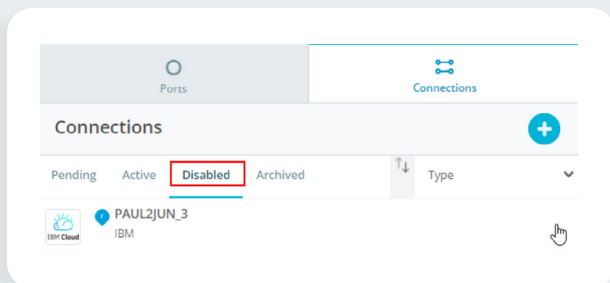
7 To enable it, click on the connection. This will take you to the connection details page.
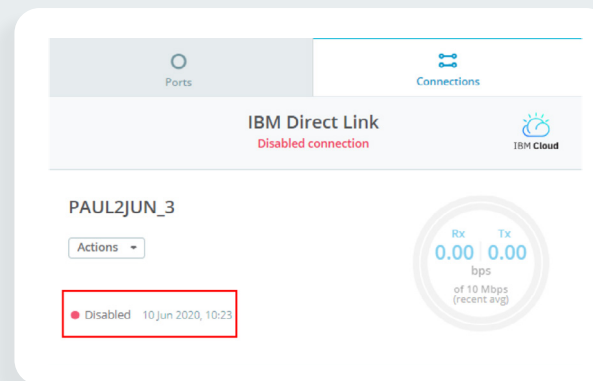
8 Click the "Actions" drop down list, and select '**Enable**'.
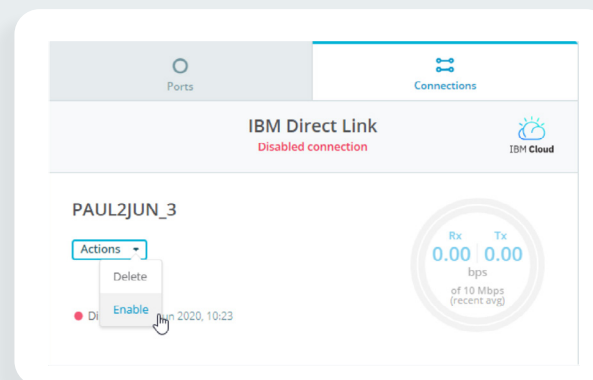
9 You will see the connection being enabled.
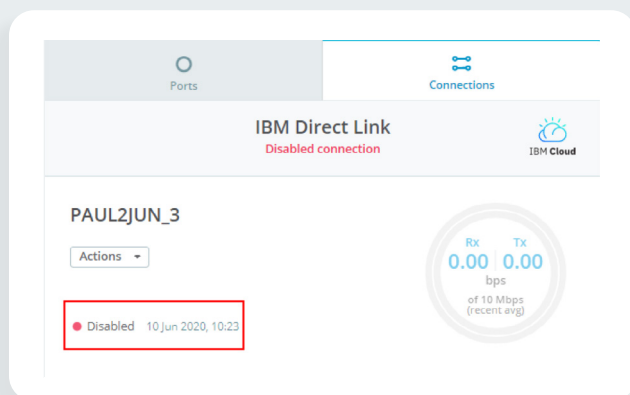
10 Once the connection is enabled, you will see a banner at the top of the screen stating that your connection is enabled and active.
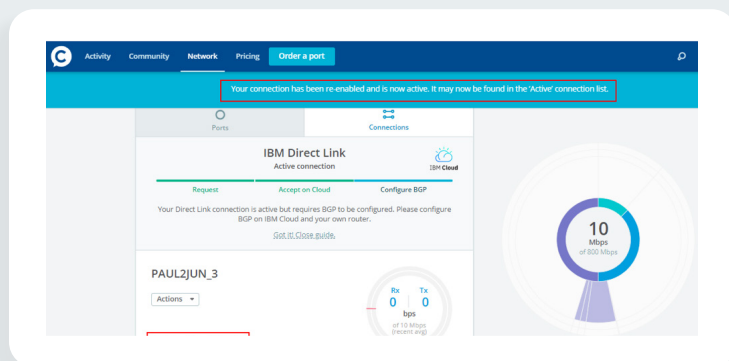
11 Click on '**Connections**'. Click on the '**Active**' tab where you will find your connection listed as enabled and active.

FAQ

How does Console Connect integrate with IBM Cloud Direct Link Connect?
Console Connect utilises Application Programming Interfaces (APIs) with IBM Cloud Direct Link Connect in order to provision the L2 connection to IBM Cloud.

Does the bandwidth (rate limit) of the L2 Connections need to match the IBM Cloud Direct Link Connect tier?
No, they may differ. The Console Connect Platform gives you the option to use the same bandwidth as the IBM Cloud Direct Link Connect or lower.

If I select a Rate Limit of 10Mbps to IBM Cloud Direct Link Connect, how is it provisioned?
If 10Mbps was input as the rate limit then Console Connect will provision a 10Mbps L2 circuit from the source port.

Does IBM Cloud meter bandwidth for Direct Link products?
Yes. Bandwidth usage across the Direct Link service between customers and IBM Cloud is free and unmetered. IBM Cloud does meter outbound bandwidth from IBM Cloud services to the public internet.

Does IBM Cloud allow redundancy?
Refer to the following link by IBM that has details are regarding redundancy:
https://cloud.ibm.com/docs/direct-link?topic=direct-link-models-for-diversity-and-redundancy-in-direct-link

Does IBM Cloud Direct Link Connect offer a Service Level Agreement (SLA)?
There is no SLA on Direct Link today. Customers can achieve 99.999% effectively with two or more Direct Links that are properly configured for failover by using BGP, but IBM cannot control that or provide an SLA on it.

How can I achieve redundancy with IBM Cloud Direct Link?
Console Connect provides diverse NNIs in every location, so you can achieve redundancy by creating a second connection to the other NNI.

What is the difference between the default "local" routing and the global routing add-on for Direct Link?
The local routing option is the default routing option. If your Direct Link is connected at the local PoP, it provides access to all data centres within that same market. In some markets, local routing is applicable for stand-alone PoP locations and direct links that are terminated at the data centre. Check the list of expanded markets for more information.

With our standard Direct Link offering, you can send traffic between the data centres in your selected region. If you need access to other data centres outside of the specified region, you must order the global routing add-on. For example, you might use global routing to share workloads between dispersed IBM Cloud resources (such as Dallas to Ashburn, or Dallas to Frankfurt).

Does Direct Link support Jumbo frames?
Jumbo frames (up to 9214 bytes) are supported on Direct Link Connect, but a support request must be raised before connection is made.

Can I give any name to a connection?
You can give any name you want to a connection as long as it complies with the validation rules in place. Below is a list of accepted characters for an IBM connection name. Anything outside of this will not be valid.

1. Alphabets characters
2. Numeric characters
3. Special characters - '-' and '_'

Definitions ―

- **Termination Location**: Established physical NNI with IBM Cloud in multiple locations can be found here.
- **Port Speed Options**: Select 50Mbps, 100Mbps, 200Mbps, 500Mbps, 1Gbps, 2Gbps, or 5Gbps.
- **Redundancy**: IBM Cloud provides connections to two (2) diverse cross-connect routers (XCRs) as part of the product. To establish redundant connectivity, customers must configure BGP on each Direct Link connection as they prefer. Examples include options such as these: prefer lowest MED, prefer highest local-preference, or prefer shorter AS paths.
- **Local/Global Routing Options**: The Local Routing option is the default routing option. It provides access to data centres within the same market as the Direct Link PoP (denoted, for example, as DAL, AMS, or MEL). The Global Routing option is required as an add-on to connect your IBM cloud resources to other IBM Cloud resources in data centres outside the local market. It is used to share workloads between IBM Cloud resources (for example Dallas to Ashburn, or Dallas to Frankfurt).
- **Connection name**: A user defined name which needs to adhere to naming conventions.
- **Type/Flavor**: Direct Link flavor (EXCHANGE, CONNECT supported as of this writing).
- **Provider**: Network provider name.
- **Port**: Pre-defined shared port label for unambiguous port identification.
- **Speed**: One of the supported speeds for the selected offering.
- **VLAN ID**: Layer-2 802.1Q ID allocated by IBM.
- **BGP ASN**: May be requested by customer per IBM spec, or allocated by IBM.
- **BGP Router IPs**: IPs assigned for BGP exchanges between routers.
- **Global**: Scope of the peering connection: Global or local.
- **Service Key:** Unique identifier assigned to the connection by IBM

References

1. **IBM Cloud Direct Link Connect overview**:
   https://cloud.ibm.com/docs/direct-link?topic=direct-link-get-started-with-ibm-cloud-direct-link

2. **Troubleshooting**:
   https://cloud.ibm.com/docs/direct-link?topic=direct-link-configure-ibm-cloud-direct-link#configure-ibm-cloud-direct-link

3. **FAQ**:
   https://cloud.ibm.com/docs/direct-link?topic=direct-link-faqs

Contact us

If you have any enquiry, please contact Console Connect by consoleconnect@pccwglobal.com or visit www.consoleconnect.com

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Germany
Schillerstr. 31 | 60313 Frankfurt/M. | Germany

United States
475 Springpark Place | Suite 100 | Herndon | VA 20170 | USA

Singapore
6 Temasek Boulevard | #41-04A/05 | Suntec Tower Four | 038986 | Singapore

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11F – 11A-3 | Imperial Hotel Tower | 1-1-1, Uchisaiwaicho, Chiyoda-ku
Tokyo 100-0011 | Japan

South Africa
Building 12 | 1 Woodmead Drive | Woodmead | Johannesburg 2191 | South Africa

UAE, Dubai
Office 401 & 408 | Level 4 | Arjaan Business Tower| Dubai Media City | Dubai

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Join our community of experts.

www.consoleconnect.com
Talk to us: sales@consoleconnect.com