

IQUILA

SOFTWARE DEFINED NETWORKS

iQuila Cloud Guide to Setting up a Bridge in Windows

IQ22071r6

This Document Applies to:

iQuila Cloud

www.iQuila.com

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iQuila cloud guide to setting up a bridge in windows.

Introduction:

The iQuila Cloud Bridge software is an advanced AI-driven application that can bridge your entire network to the iQuila Cloud Layer2 virtual switch, this advanced software can be used in several different scenarios. This document will provide instructions on installing and setting up the Bridge software, you will be required to have a good understanding of Layer 2 networking.

Please use this software with great caution, incorrect use of this software could expose your network or cause network Loops.

(Please take care not to cause a Layer 2 loop).

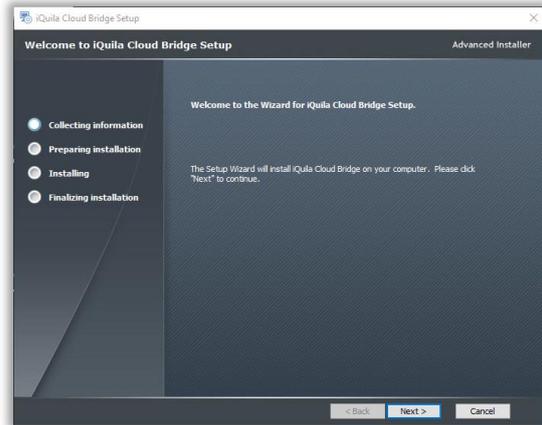
Prerequisites

Create a Bridge Device on your iQuila Cloud account. An email will be sent to you if you enter an email address, otherwise you can download the [iQuila Windows Bridging software](#) here or via the iQuila Cloud Portal next to your device and save it to the Windows Server or Windows PC that you would be installing the bridging software on.

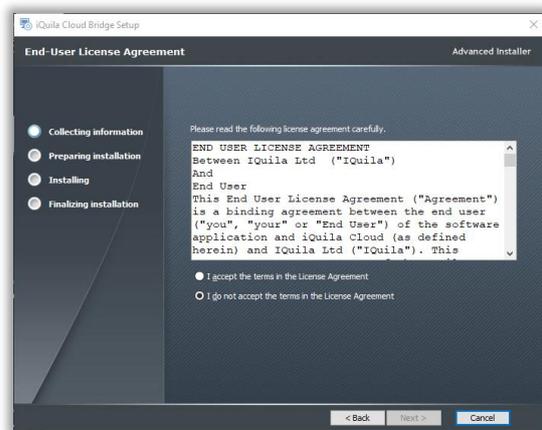
(Please note, this software should not be installed on laptops or tablet devices).

Installing iQuila Bridge:

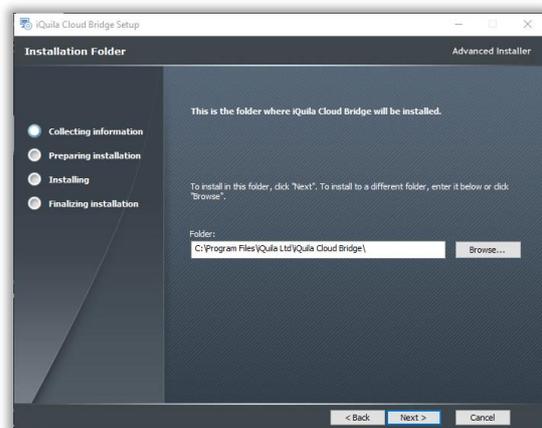
Install the iQuila Bridging software by launching the application from the email link or from the file you [downloaded](#) from the Cloud Portal.



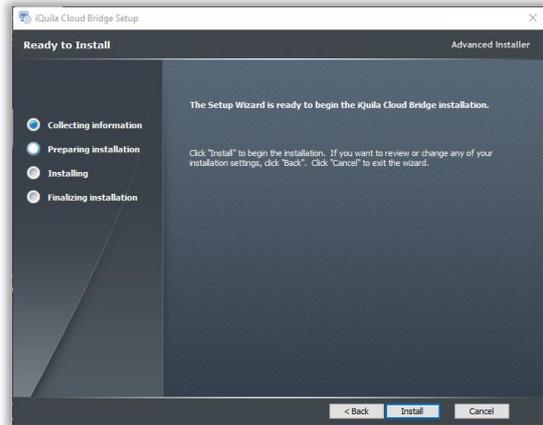
Accept the License Agreement.



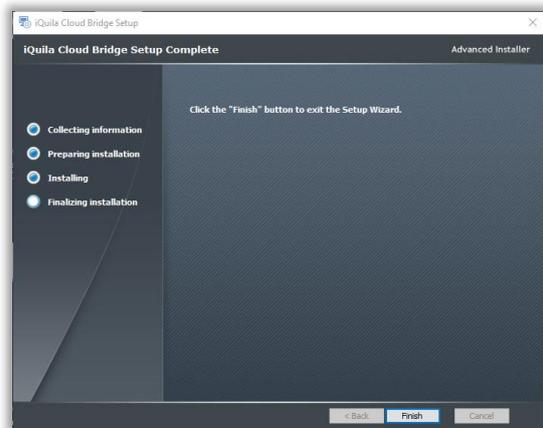
You may change the install path of the application, but we would recommend this is left to the default path.



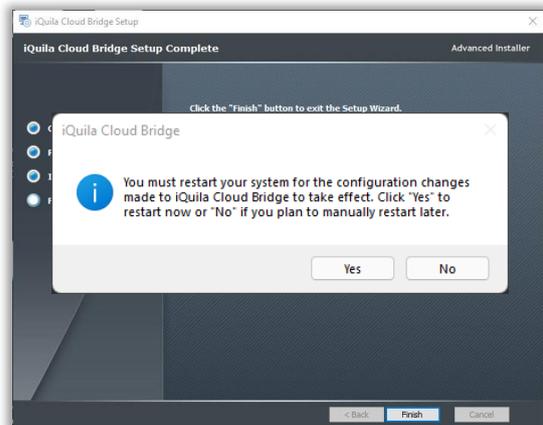
Once the wizard is ready, proceed with the install.



Click finish.



You must restart your system for configurations to take effect. This is mandatory for the software to function correctly.



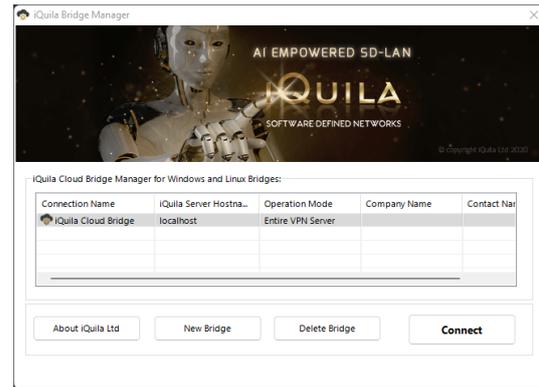
To launch the iQuila Bridge application click on the iQuila Bridge Manager icon that has been placed on your desktop. This will launch the iQuila Cloud Bridge Manager.



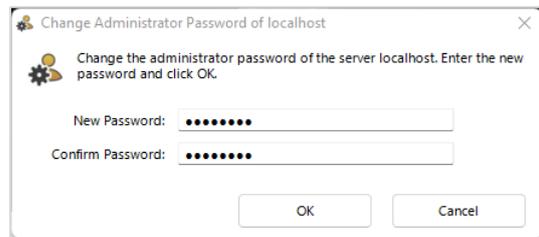
iQuila Cloud Bridge Manager.

Click Connect

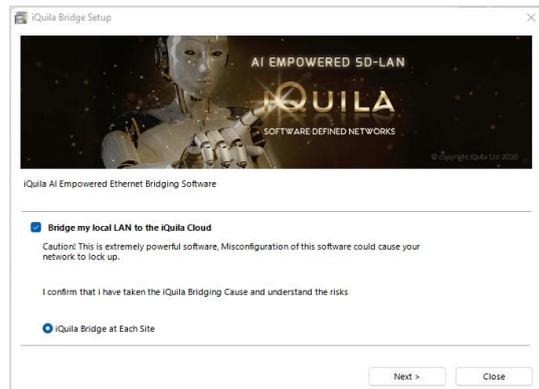
Please note if for some reason there is no entry here you will need to add a Bridge. Go to the section below in this document labelled Adding a Bridge.



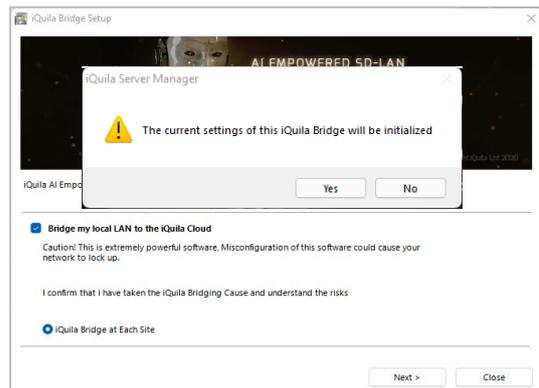
The system will ask you to create a new password. Enter a new password in the password box and click OK.



You will be prompted with a statement asking you to confirm that you have had training and understand how Layer 2 networking works. If you understand Layer 2 networking, please proceed. Alternatively, please contact iQuila Support.



The wizard will ask for confirmation to use the current settings. Click Yes.

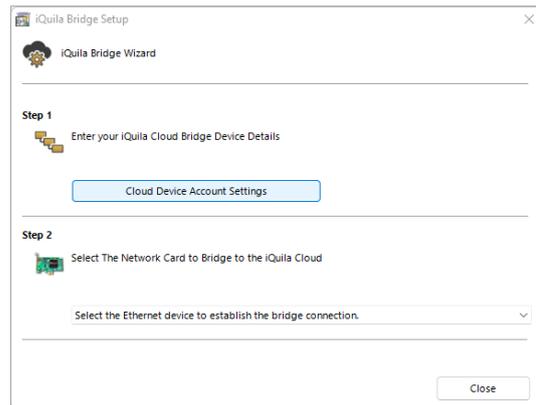


iQuila Bridge Wizard Step 1

Entering the iQuila Cloud Bridge Account details.

Select Cloud Account Setup.

Note: Details required here are in the email sent when the Bridge device was created.



Cloud Account Setup

Display name:

Enter a name for your Cloud Device. E.g Device name or location

Host Name:

This is the Hostname of the iQuila Cloud server you are connecting to. This will be shown in the email that was sent when you created your device on the iQuila Portal.

Port Number:

Please leave this as 443 unless directed otherwise by iQuila support.

Virtual Switch:

The name of the virtual Switch that your Bridge device resides on.

Device Name:

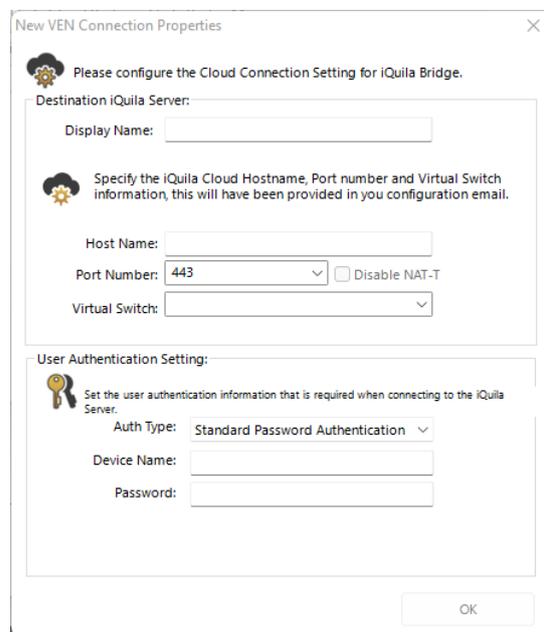
The iQuila Bridge Device Name.

Password:

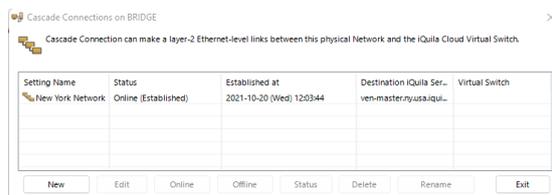
The password you created for the device.

Proxy setting:

If you are connecting via a Proxy server, please enter the correct Proxy information
Click OK.

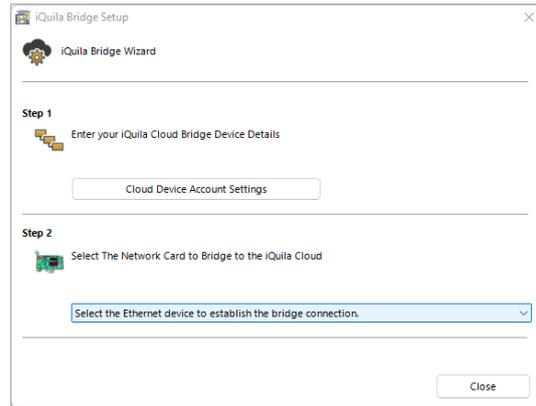


The new connection will show online.
Click Exit.



iQuila Bridge Wizard Step 2

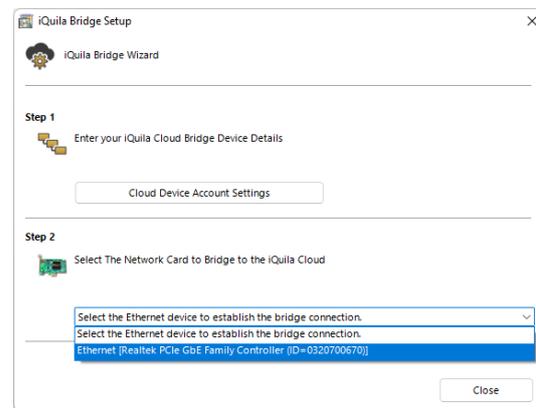
Select the Network Card to Bridge to the iQuila Cloud.



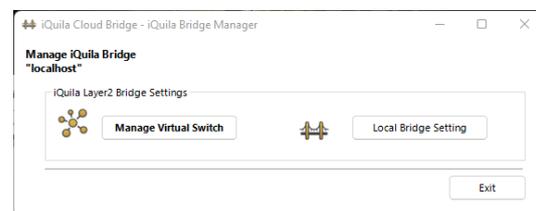
Select the dropdown and select the Network adaptor you would like to Bridge. Once selected, click Close. This will now bridge your network to the iQuila Cloud Switch.

Click Close.

(All traffic that is located on this network adaptor will now be bridged.)

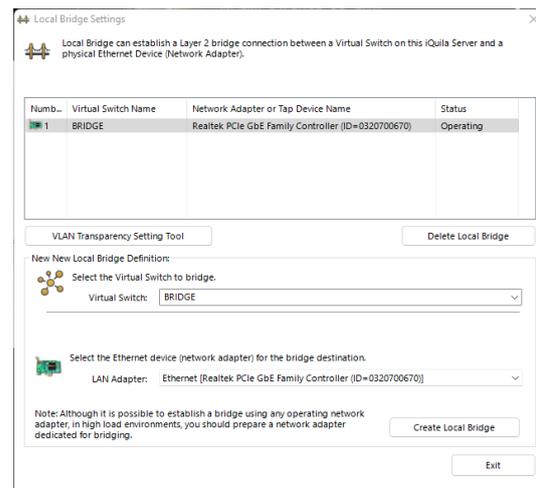


To check your Bridge connection select Local Bridge Settings.



The status of the Bridge is showing Operating.

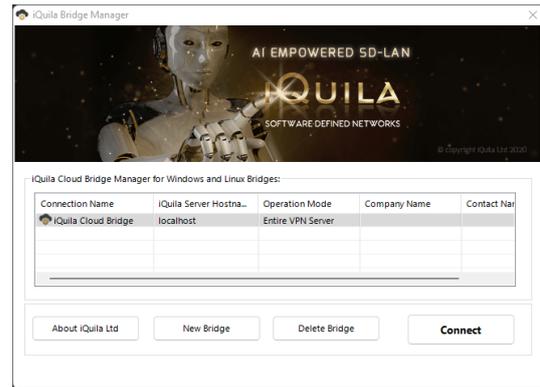
Select Exit twice to close.



Adding a Bridge.

Add New Bridge allows you setup another Bridge connection.

Please contact an iQuila Support if required for extra support on this option.



Note if for some reason entry was blank when you first opened the iQuila Cloud Bridge Manager.

Click Add New Bridge.

Enter a Connection name. e.g. Network or Location.

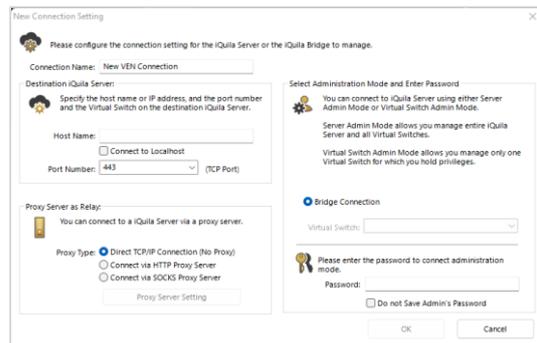
Enter Host Name found on the email.

Tick Connect to Localhost

Leave Port as 443

Enter Password

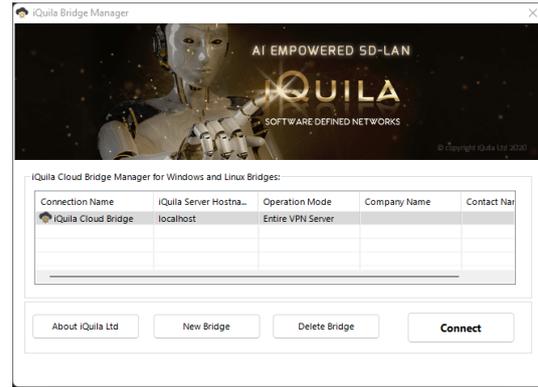
Click OK.



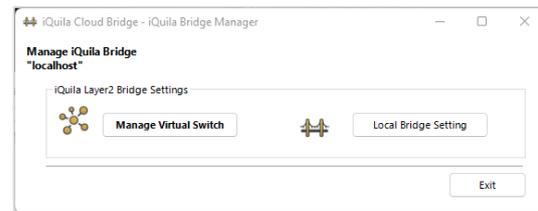
Viewing Active Sessions on the network.

Launch the iQuila Bridge Manager.

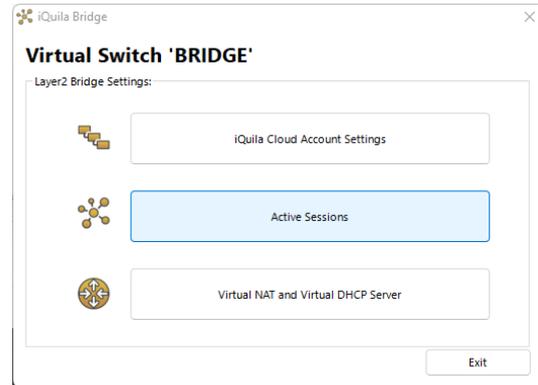
Click Connect.



Select Manage Virtual Switch.

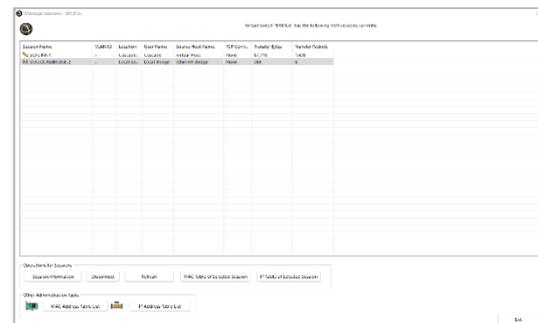


Select Active Sessions.



The Sessions Manager window will be displayed. This will show all active sessions on the remote network and local bridge.

There are a number of functions at the bottom that are now covered in the next sections.



In the Operations for Session area:

Session Information:

Double click the SID-LocalBridge-# opens detailed information on the currently selected session.

Item	Value
User Name (Authentication)	Local Bridge
VLAN ID	-
Server Product Name	iQuila VEN Bridge (64 bit) (VPN)
Server Version	5.00
Server Build	Build 3402
Connection Started at	2021-10-20 (Wed) 11:00:11
First Session has been Established since	2021-10-20 (Wed) 11:00:11
Current Session has been Established since	2021-10-20 (Wed) 11:00:11
Half Duplex TCP Connection Mode	No (Full Duplex Mode)
VoIP / QoS Function	Enabled
Number of TCP Connections	0
Maximum Number of TCP Connections	0
Encryption	Disabled (No Encryption)
Use of Compression	No (No Compression)
UDP Acceleration is Supported	No
UDP Acceleration is Active	No
Session Name	SID-LOCALBRIDGE-2
Session Key (160 bit)	81FD216D510F2B7E0A4F0DFD198F1AF6CADC6881

MAC Table of Selected Session:

Displays of all MAC addresses on the local bridge.

Session Name	VLAN ID	MAC Address	Created at	Updated at	Location
SID-LOCALBRIDGE-1	-	00-50-56-8F-7F-4D	2021-03-01 11:5543	2021-03-02 07:36:50	On iQuilaTest1
SID-LOCALBRIDGE-1	-	10-90-27-87-60-4C	2021-03-01 11:5543	2021-03-02 07:36:49	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-C0-16	2021-03-01 11:5543	2021-03-02 07:36:50	On iQuilaTest1
SID-LOCALBRIDGE-1	-	5E-CC-6C-30-F7-E6	2021-03-01 11:5542	2021-03-02 07:36:49	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-27-83	2021-03-01 11:5543	2021-03-02 07:36:47	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-36-49	2021-03-02 06:22:51	2021-03-02 06:26:18	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-11-D4	2021-03-01 11:5541	2021-03-02 07:36:45	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-0D-30	2021-03-02 06:12:40	2021-03-02 06:23:06	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-8F-93	2021-03-01 11:5541	2021-03-02 07:36:45	On iQuilaTest1
SID-LOCALBRIDGE-1	-	5E-8C-8D-9E-98-5A	2021-03-01 11:5541	2021-03-02 07:36:49	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-4E-FC-FC-83-DF	2021-03-01 11:5541	2021-03-02 07:36:50	On iQuilaTest1
SID-LOCALBRIDGE-1	-	AD-3E-68-AD-62-F7	2021-03-01 11:5543	2021-03-02 07:36:49	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-F2-20	2021-03-01 11:5547	2021-03-02 07:36:50	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-20-16	2021-03-01 11:5545	2021-03-02 07:36:45	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-04-47	2021-03-01 11:5543	2021-03-02 07:36:50	On iQuilaTest1
SID-LOCALBRIDGE-1	-	3C-EC-EF-70-02-CF	2021-03-01 11:5542	2021-03-02 07:36:48	On iQuilaTest1
SID-LOCALBRIDGE-1	-	AD-3E-68-AD-78-03	2021-03-01 11:5542	2021-03-02 07:36:49	On iQuilaTest1
SID-LOCALBRIDGE-1	-	5E-68-20-88-88-8E	2021-03-02 06:06:18	2021-03-02 07:36:50	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-79-C3	2021-03-01 11:5543	2021-03-02 07:36:48	On iQuilaTest1
SID-LOCALBRIDGE-1	-	00-50-56-8F-A3-93	2021-03-01 11:5542	2021-03-02 07:36:35	On iQuilaTest1
SID-LOCALBRIDGE-1	-	5E-78-90-C8-27-24	2021-03-02 05:39:28	2021-03-02 07:36:50	On iQuilaTest1

IP Table of the selected session:

Displays all IP addresses on the local bridge.

Session Name	IP Address	Created at	Updated at	Location
SID-LOCALBRIDGE-1	10.201.1.200	2021-03-02 06:40:40	2021-03-02 07:36:43	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.0.5	2021-03-02 07:37:05	2021-03-02 07:37:05	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.0.20	2021-03-02 07:34:56	2021-03-02 07:36:18	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.0.30	2021-03-01 11:5542	2021-03-02 07:37:10	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.2 (DHCP)	2021-03-01 21:58:27	2021-03-02 07:37:13	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.7	2021-03-02 07:36:41	2021-03-02 07:36:44	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.27 (DHCP)	2021-03-02 06:06:19	2021-03-02 07:36:55	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.33 (DHCP)	2021-03-02 07:36:22	2021-03-02 07:36:22	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.38 (DHCP)	2021-03-02 07:36:19	2021-03-02 07:36:19	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.69	2021-03-02 07:36:26	2021-03-02 07:37:05	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.80 (DHCP)	2021-03-02 05:39:28	2021-03-02 07:37:16	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.84	2021-03-01 11:5549	2021-03-02 07:37:15	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.85	2021-03-02 07:37:15	2021-03-02 07:37:15	On iQuilaTest1
SID-LOCALBRIDGE-1	10.21.1.93	2021-03-02 07:36:19	2021-03-02 07:36:22	On iQuilaTest1
SID-LOCALBRIDGE-1	fe80:3eccc9ff7e70439	2021-03-02 07:37:09	2021-03-02 07:37:09	On iQuilaTest1
SID-LOCALBRIDGE-1	fe80:3eccc9ff7e702cf	2021-03-02 07:36:24	2021-03-02 07:36:24	On iQuilaTest1
SID-LOCALBRIDGE-1	fe80:4c9b:3e9d:9561:4a2...	2021-03-01 21:58:27	2021-03-02 07:37:13	On iQuilaTest1

Other Administration Tasks area:

MAC Address Table List:

Displays all MAC addresses on the local database. This will be all the MAC addresses the iQuila Bridge software can see across the complete network.

The MAC address table database on the Virtual Switch 'BRIDGE' has the following entries. (Displays only entries of session SID-LOCALBRIDGE-1)

Session Name	VLAN ID	MAC Address	Created at	Updated at	Location
SID-LOCALBRIDGE-1	-	00-50-56-8F-7F-4D	2021-03-01 11:5543	2021-03-02 07:3650	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	50-80-27-87-60-FC	2021-03-01 11:5543	2021-03-02 07:3649	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-C0-16	2021-03-01 11:5543	2021-03-02 07:3650	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	5E-CC-6C-90-FF-6E	2021-03-01 11:5542	2021-03-02 07:3649	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-27-83	2021-03-01 11:5543	2021-03-02 07:3647	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-38-49	2021-03-02 06:2251	2021-03-02 06:2618	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-11-04	2021-03-01 11:5541	2021-03-02 07:3645	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-C0-20	2021-03-02 08:1240	2021-03-02 06:2306	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-6F-99	2021-03-01 11:5541	2021-03-02 07:3645	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	5E-4C-40-7E-95-5A	2021-03-01 11:5541	2021-03-02 07:3649	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-4E-FC-FC-83-DF	2021-03-01 11:5541	2021-03-02 07:3650	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	A0-3E-48-AD-63-F7	2021-03-01 11:5543	2021-03-02 07:3649	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-02-20	2021-03-01 11:5547	2021-03-02 07:3650	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-00-16	2021-03-01 11:5545	2021-03-02 07:3645	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-D4-47	2021-03-01 11:5543	2021-03-02 07:3650	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	3C-4C-4F-70-02-CF	2021-03-01 11:5542	2021-03-02 07:3648	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	A0-3E-48-AD-76-03	2021-03-01 11:5542	2021-03-02 07:3649	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	5E-48-20-86-88-6E	2021-03-02 06:0618	2021-03-02 07:3650	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-70-C5	2021-03-01 11:5543	2021-03-02 07:3648	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	00-50-56-8F-A3-99	2021-03-01 11:5542	2021-03-02 07:3625	On iQuila-TestV10
SID-LOCALBRIDGE-1	-	5E-78-90-C6-27-24	2021-03-02 09:3928	2021-03-02 07:3650	On iQuila-TestV10

IP address Table:

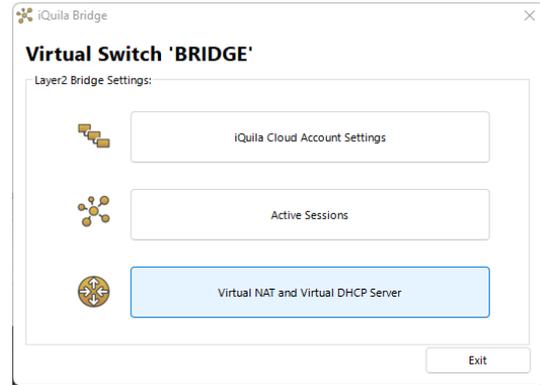
Displays all IP addresses on the local database. This will be all the IP addresses the iQuila Bridge software can see across the complete network.

The IP address table database on the Virtual Switch 'BRIDGE' has the following entries.

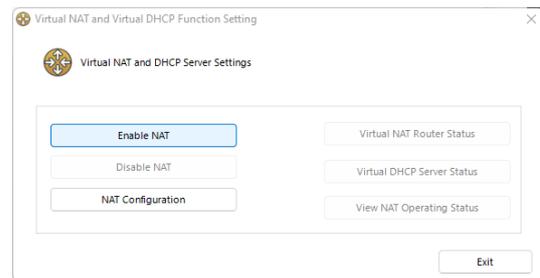
Session Name	IP Address	Created at	Updated at	Location
SID-LOCALBRIDGE-1	10.0.0.108	2020-11-30 21:0314	2020-11-30 21:1559	On iQuila-TestV10
SID-LOCALBRIDGE-1	10.0.0.101	2020-11-30 18:0650	2020-11-30 21:1610	On iQuila-TestV10
SID-LOCALBRIDGE-1	10.0.10.3	2020-11-30 18:0706	2020-11-30 21:1539	On iQuila-TestV10
SID-LOCALBRIDGE-1	10.0.10.20	2020-11-30 21:1509	2020-11-30 21:1535	On iQuila-TestV10
SID-LOCALBRIDGE-1	10.17.30.126	2020-11-30 20:5333	2020-11-30 21:1517	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.1.99	2020-11-30 21:1509	2020-11-30 21:1512	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.1.200	2020-11-30 18:0651	2020-11-30 21:1609	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.2	2020-11-30 21:1146	2020-11-30 21:1558	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.8	2020-11-30 21:1439	2020-11-30 21:1520	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.12	2020-11-30 18:0649	2020-11-30 21:1600	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.21	2020-11-30 18:0714	2020-11-30 21:1558	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.31 (DHCP)	2020-11-30 21:0535	2020-11-30 21:1535	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.62 (DHCP)	2020-11-30 18:3419	2020-11-30 21:1610	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.64	2020-11-30 18:0659	2020-11-30 21:1606	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.65	2020-11-30 18:0651	2020-11-30 21:1607	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.67	2020-11-30 21:1601	2020-11-30 21:1601	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.73	2020-11-30 21:1430	2020-11-30 21:1538	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.78	2020-11-30 18:0649	2020-11-30 21:1610	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.82	2020-11-30 20:5333	2020-11-30 21:1517	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.87	2020-11-30 21:1608	2020-11-30 21:1610	On iQuila-TestV10
SID-LOCALBRIDGE-1	192.168.100.104 (DHCP)	2020-11-30 20:4256	2020-11-30 21:1559	On iQuila-TestV10

Running Virtual NAT and DHCP:

Select Virtual NAT and Virtual DHCP server.

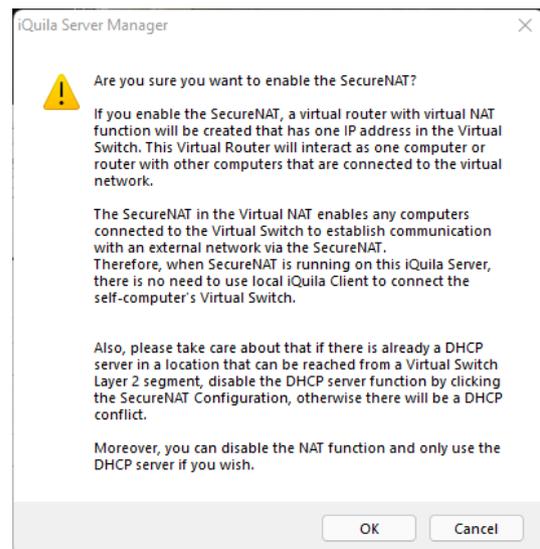


Select Enable NAT to turn NAT on.

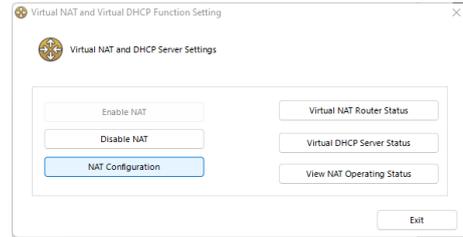


Please read as an understanding of what NAT can do is required from this point.

Click OK to Enable NAT.

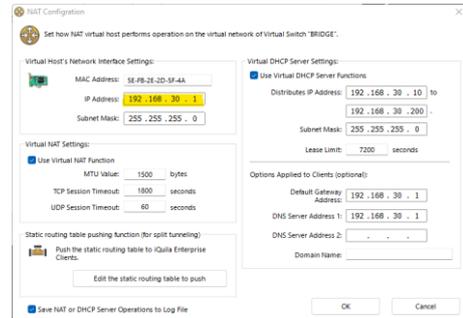


Select configure NAT to setup a custom NAT configuration.



The IP Address highlighted would become the default Gateway Address of your bridge connection.

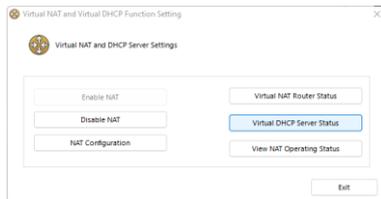
Click OK to close.



Status information can be found with the following options: Virtual NAT Router Status.



Virtual DHCP Server Status.



View NAT Operating status.

