

IQUILA

SOFTWARE DEFINED NETWORKS

iQuila Configuration Guide for Enterprise Management Interface

iQ22078r3

This Document Applies to:

iQuila Enterprise v4.35

www.iQuila.com

iQuila Management Interface Configuration

This document will guide you through the setup and configuration of iQuila Network Management, this will allow you to link all iQuila hardware devices and virtual devices into a management switch for easy management and access without the requirement for opening ports on remote locations.

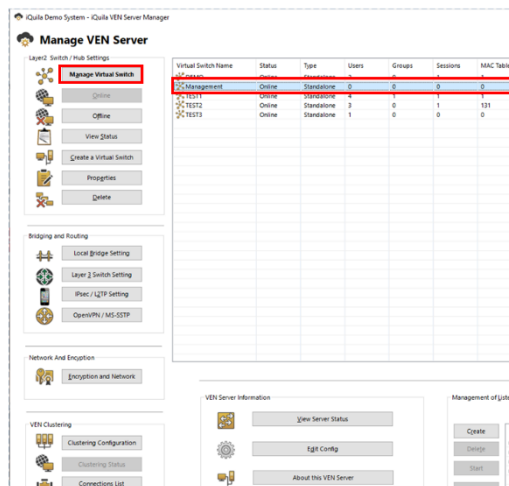
Configuring the management interface on the iQuila Server.

Step 1

From the Server Manager create a new virtual switch called management.

(If your iQuila Enterprise server is part of Cluster please Select Static Virtual Switch under Set Clustering on New Virtual Switch setup).

Select the **Management Virtual Switch** you just created and select **Manage Virtual Switch**.



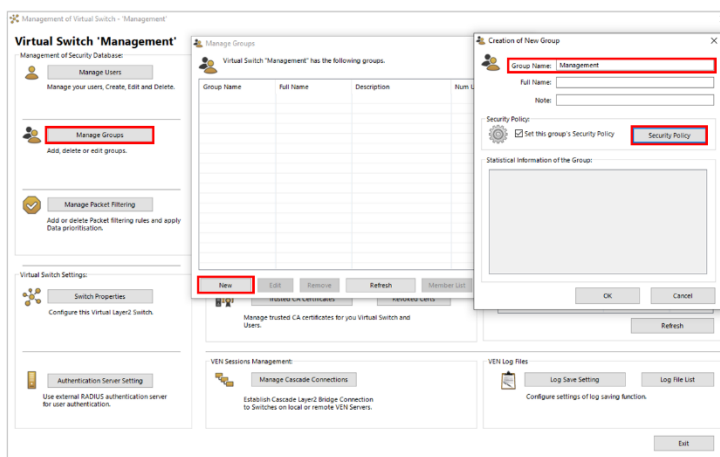
Step 2

Select **“Manage Group”** the manage groups window will be displayed.

Select **“New”** then in group name **Enter Management**,

Tick the box **“Set this group's Security Policy”**.

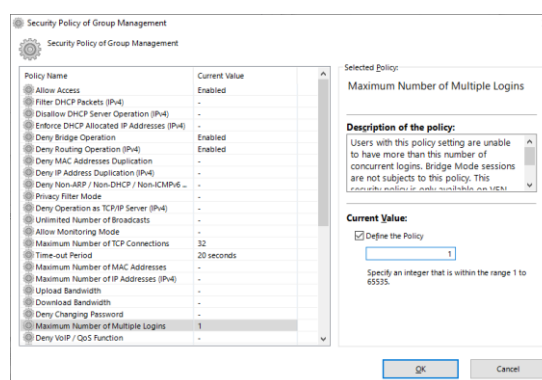
Click the button **Security Policy**, this will display the Security Policy window.



Please set the following Security Options:

- Deny Bridge Operation: Enable
- Deny Routing Operation: Enable
- Maximum Number of Multiple Logins = 1

Select **OK** to close the Security Policy window and select **OK** on the Group Window to save the policy.



Step 3

From the Virtual Switch Management

Selecting Manage Users. Will display the manage user window.

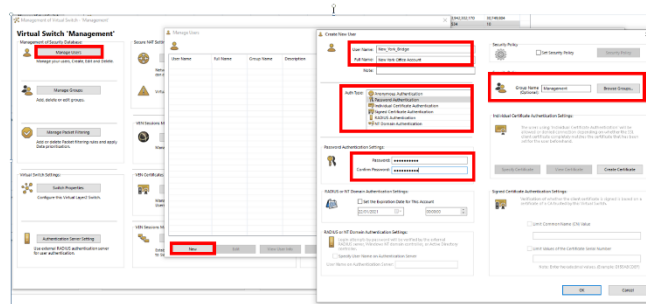
Select New, this will show the create new user window.

Enter the name of the device in the username for this example, we have selected New_York_Bridge for our New York office.

Under the Groups Section, **Select Browse Groups** and **select the Management group.**

Under Auth Type **Select Password authentication,**

In the Password section, **enter a Strong password** and **click OK** to save the user.



Configuring your Hardware to Login to the Management Interface

Step 4

Either from the console windows or via SSH login to the bridge device with the default credentials

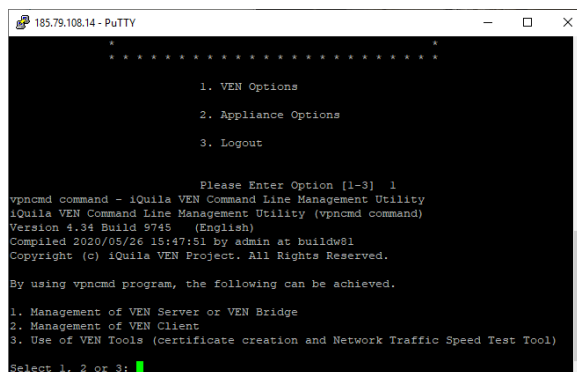
User = console

Password =! console



Select option 1

Then option 2 Management of VEN Client



You will be asked to enter the hostname of the client you are connecting to. **Enter localhost and press enter.**

```

185.79.108.14 - PuTTY
Please Enter Option [1-3] 1
vpngcmd command - iQuila VEN Command Line Management Utility
iQuila VEN Command Line Management Utility (vpngcmd command)
Version 4.34 Build 9745 (English)
Compiled 2020/05/26 15:47:51 by admin at buildw81
Copyright (c) iQuila VEN Project. All Rights Reserved.

By using vpngcmd program, the following can be achieved.

1. Management of VEN Server or VEN Bridge
2. Management of VEN Client
3. Use of VEN Tools (certificate creation and Network Traffic Speed Test Tool)

Select 1, 2 or 3: 2

Specify the host name or IP address of the computer that the destination VEN Client is operating on.
If nothing is input and Enter is pressed, connection will be made to localhost (this computer).
Hostname or IP Address of Destination:
Connected to VEN Client "localhost".

VEN Client:

```

You can now enter commands to configure the VEN Client,

Step 5

1. Configuring Client from CLI

First, we need to create a virtual network adaptor.

Enter the command, **NicCreate**

Press Enter.

You will be asked to enter a Virtual Adaptor Name **please enter the name.**

Management

Next, enter the command.

AccountCreate

You will be asked to enter a name for the VEN connection string enter **Management**

You will be asked to enter the hostname, **enter the IP Address or DNS name** of the iQuila Server where the Management network is hosted on and **the port number** you are connecting on e.g., **iquila.yourdomain.com:443**

Next, you will be prompted to enter the Destination Hub Name, enter the **name** **Management** and **press enter.**

Next, **enter the connection username**, this is the name we created earlier

New_York_Bridge

You will be asked to **enter the Network Adaptor Name**

Management

Now, we need to create the Authentication type, **enter the command**

AccountPasswordSet

You will be asked to enter the name of the Connection String, **enter the account we created.**

Management Press **enter**, next you will be asked to enter the password for the account, **enter the password and confirm the password**.

You will then be asked to specify the type of connection, **enter **Standard****, and press **enter**

Now, **Set the account to auto-start** on the rebooting of device **AccountStartupSet**

To connect the account, **enter **AccountConnect****

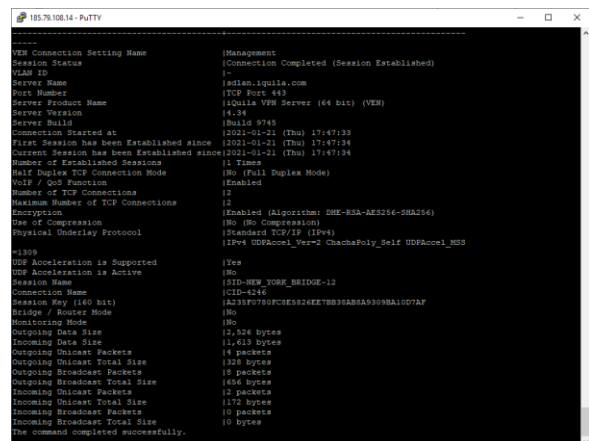
You will be prompted, to **enter the account name **Management****

To check that this account is connected **enter **AccountStatusGet****

Enter the Account Name

Management

This will show you the connection status of the connection to the management server.



```

-----
VEM Connection Setting Name      (Management)
Session Status                   (Connection Completed (Session Established))
VLAN ID                          (-)
Server Name                      (iQuila.iquila.com)
Port Number                      (TCP Port 443)
Server Product Name              (iQuila VEM Server (64 bit) (VEM))
Server Version                   (4.34)
Server Build                     (Build 9745)
Connection Started at            (2021-01-21 (Thu) 17:47:33)
First Session has been Established since (2021-01-21 (Thu) 17:47:34)
Current Session has been Established since (2021-01-21 (Thu) 17:47:34)
Number of Established Sessions    (1 Times)
Half Duplex TCP Connection Mode  (No (Full Duplex Mode))
VOIP / DoD Function              (Enabled)
Number of TCP Connections        (2)
Maximum Number of TCP Connections (2)
Encryption                       (Enabled (Algorithm: GHE-RSA-AES256-SHA256))
Use of Compression               (No (No Compression))
Physical Underlay Protocol        (Standard TCP/IP (IPv4))
IPv4 Underlay_Ver=0 ChachaPoly_Self UDPAccel_MSS
-----
=1309
UDP Acceleration is Supported    (Yes)
UDP Acceleration is Active       (No)
Session Name                     (SID-NEW YORK_BRIDGE-12)
Connection Name                  (CID-8216)
Session Key (160 bit)            (A231F076FC8E826EE78B388A9A9398A10D7AF)
Bridge / Router Mode             (No)
Monitoring Mode                  (No)
Outgoing Data Size               (2,526 bytes)
Incoming Data Size               (1,413 bytes)
Outgoing Unicast Packets         (14 packets)
Outgoing Unicast Total Size      (328 bytes)
Outgoing Broadcast Packets       (0 packets)
Outgoing Broadcast Total Size    (644 bytes)
Incoming Unicast Packets         (2 packets)
Incoming Unicast Total Size      (172 bytes)
Incoming Broadcast Packets       (0 packets)
Incoming Broadcast Total Size    (0 bytes)
The command completed successfully.
  
```

Accessing a client over the management network

Step 6

From the console of the bridge device, **select option 2 Appliance Options**,

Then, **select option 2 Remote Management Address**

This will display the address you need to connect to make a note of the address for use later.

(if this option is not on your hardware please let me know and we can then login remotely and update it, or if you're able to obtain the IPv6 address from the sessions option on the iQuila Management Virtual Switch)



```

.....
* iQuila *
.....
Software Defined Networks
Support Email: support@iquila.com
.....

1. Appliance IP
2. Remote Management Address
3. Appliance Date
4. Change console user password
5. Change Appliance IP
6. Restrict iQuila Management by IP
7. Reboot Appliance
8. Shutdown Appliance
9. Return-To-Main-Menu

Please Enter Option [1-9] 2

Remote Management Address: 192.168.1.100:443 #page link
...Press Enter key & go to menu....
  
```

Step 7

Create a management user for management of all device as in Step 3

Step 8

Install the iQuila Client Enterprise Software Provided in the Secure Download link <https://www.iquila.com/secure-documents/>

If you install this on a system that you would like to access the management of the servers.

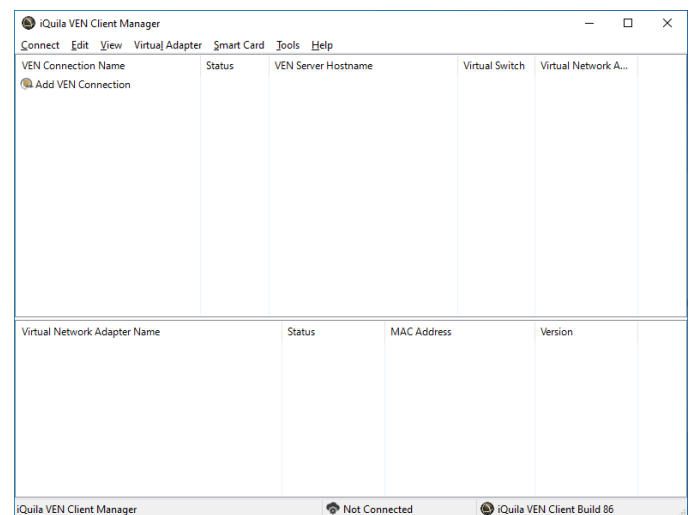
(or bridge the Management virtual switch with a Network interface you would like to expose the management of the server on, you may need to add an extra network interface to the iQuila Server.)

Step 9

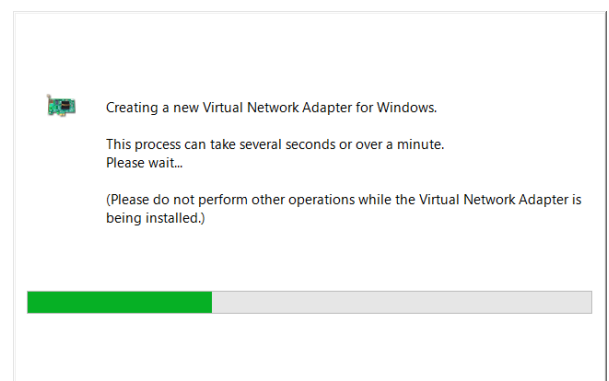
Configure the Client Software,

First, we need to install a Virtual Network Adaptor, **select Virtual Adaptors.**

Then, **new Virtual Network adaptor**, a small window will show, asking to enter a name **leave the default name VPN, and click ok.**



A new Virtual Network Adaptor will now install.



Step 10

Next Click on Add a VEN connection.

The New connection window will show.

In **Setting name**, enter Management.

In **Host Name** enter the hostname or IP address of the iQuila Server

Under Port enter the Port number e.g., **443**.

In the User Open to Authentication settings **enter your username and password you created in section 3** for the management account.

Click ok to save.

Right-click on the selected entry and **click connect**, the account should connect to the management network.

Step 11

Adding the Bridge Appliance to the iQuila Management Software

Open, the iQuila Server Manager software and **select the option New Connection**

Under connection name, **enter the name of the device** you are connecting to e.g., New York Bridge

Under Hostname enter the IPv6 address you saved in **section 6**

Under Port Number enter the port **5555**

In the password section **enter the password** you used to previously configure the device, if this device has not been previously configured, please leave it blank.

Click ok to save.

You can now manage the remote device no matter where it is located if it has an internet connection, as default the bridge devices are configured with a DHCP address for the LAN, Utilising, the management setup you are fine to leave them on DHCP.

Once the update has been applied, please refresh the portal window, and reboot the unit.

1. Login via SSH on Port 43343

Select Option 1: VEN Option

```

185.79.108.14 - PuTTY
*****
* iQuila *
*****
Software Defined Networks
Support Email: support@iquila.com
*****

1. VEN Options
2. Appliance Options
3. Logout

Please Enter Option [1-3] █

```

Select Option 2 for Management of Client VEN

Under Hostname or IP Address of Destination enter **localhost** and press enter

You are now connected, to the iQuila VEN Command lien interface for iQuila Client.

We now need to create the Management Interface enter the command.

niccreate management and **press enter**.

Now we will create the Management Account enter the command

AccountCreate Management and **press enter**.

You will be asked to enter the hostname, **enter the IP Address or DNS name** of the iQuila Server where the Management network is hosted on and **the port number** you are connecting on e.g., **iquila.yourdomain.com:443**

Next, you will be prompted to enter the Destination Hub Name, enter the **name** **Management** and **press enter**.

Next, **enter the connection username**, this is the name we created earlier **New_York_Bridge** and **press enter**.

You will be asked to **enter the Network Adaptor Name** **Management** and **press enter**.

Now, we need to create the Authentication type, **enter the command** **AccountPasswordSet Management** **press enter**.

next you will be asked to enter the password for the account, **enter the password and confirm the password**.

You will then be asked to specify the type of connection, **enter Standard, and press enter.**

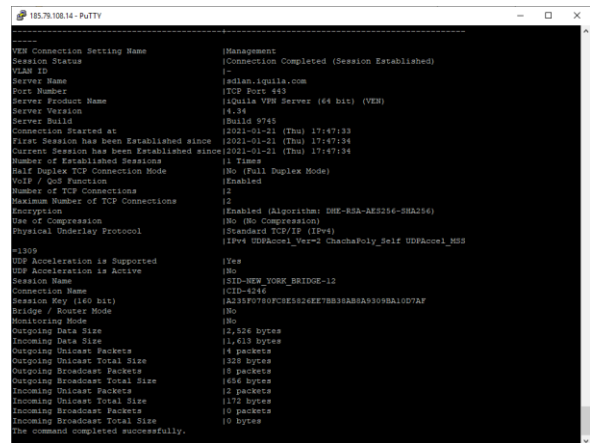
Now, **Set the account to auto-start** on the rebooting of device.

AccountStartupSet Management

To connect the account, **enter AccountConnect Management**

To check that the account as connected **enter AccountStatusGet Management**

This will show you the connection status of the connection to the management server.



```

185.78.108.14 - PuTTY
-----
VEM Connection Setting Name      (Management)
Session Status                   (Connection Completed (Session Established))
VLAN ID                           (-)
Server Name                       (8481m-iquila.com)
Port Number                       (TCP Port 443)
Server Product Name               (iQuila VEM Server (64 bit) (VEM))
Server Version                     (4.34)
Server Build                       (Build 9745)
Connection Started at             (2021-01-21 (Thu) 17:47:33)
First Session has been Established since (2021-01-21 (Thu) 17:47:34)
Current Session has been Established since (2021-01-21 (Thu) 17:47:34)
Number of Established Sessions     (1 Time)
Half Duplex TCP Connection Mode    (No (Full Duplex Mode))
Voll / QoS Function                (Enabled)
Number of TCP Connections          (12)
Maximam Number of TCP Connections (12)
Encryption                         (Enabled (Algorithm: GCM-GSMA-AE256-SHA256))
Use of Compression                 (No (No Compression))
Physical Underlay Protocol         (Standard TCP/IP (IPv4))
IPv4 UDPAccel_Ver=0 ChachaPoly_Self UDPAccel_MSS (IPv4 UDPAccel_Ver=0 ChachaPoly_Self UDPAccel_MSS)
=1309
UDP Abcelearation is Supported     (Yes)
UDP Abcelearation is Active        (No)
Session Name                       (SID-NEW_YORK_BRIDGE-12)
Connection Name                    (CID-4246)
Session Key (160 bit)              (242319740FC8E5624EE78B38A8A53998A10D7AF)
Bridge / Router Mode               (No)
Monitoring Mode                    (No)
Outgoing Data Size                  (2,524 bytes)
Incoming Data Size                  (1,613 bytes)
Outgoing Unicast Packets            (4 packets)
Outgoing Broadcast Packets          (8 packets)
Outgoing Broadcast Total Size      (656 bytes)
Incoming Unicast Packets            (2 packets)
Incoming Broadcast Packets          (0 packets)
Incoming Broadcast Total Size      (0 bytes)
Incoming Broadcast Total Size      (0 bytes)
The command completed successfully.

```