Chariot MQTT Server as a VM

Prerequisites:

- Have a computer/server capable of running VMWare or VirtualBox.
- Download the latest Chariot MQTT Server.

Overview:

Chariot MQTT Server is a MQTT 3.1.1 compliant MQTT server. It is capable of providing a functional replacement for MQTT Distributor in larger scale deployments. Like Inductive Automation's Ignition platform, it comes with a two hour re-settable trail period. It can also be set up with a license key from Cirrus Link to enable it permanently. Chariot MQTT Server provides a web based administration page for enabling and limiting user access to the MQTT server via an Access Control List (ACLs). Like MQTT Distributor it also supports TLS security and username/password authentication in addition to ACLs for user authorization.

Installing a Virtual Machine Manager:

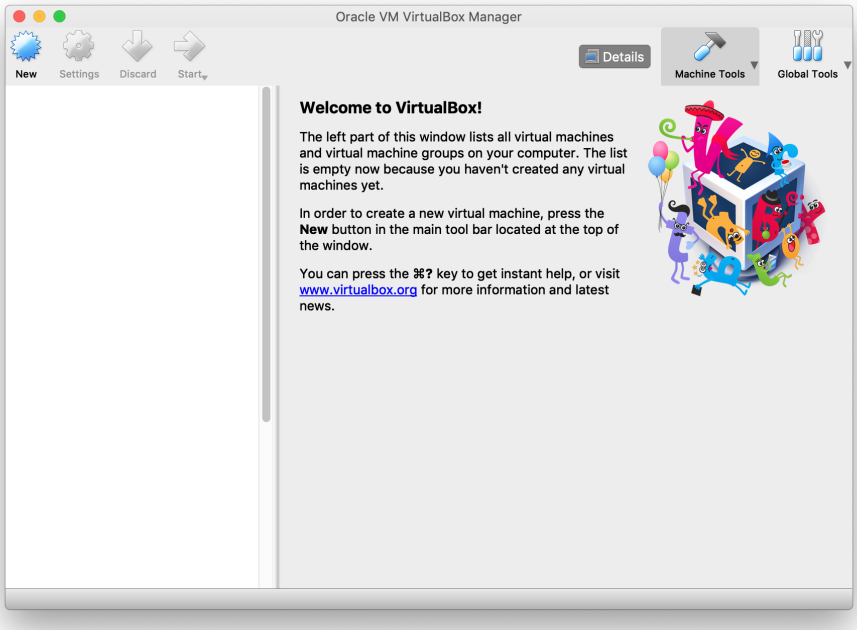
Chariot MQTT Server can be run in a number of different Virtual Machine managers. Any Virtual Machine manager that supports importing of .ofv appliances should work. Tested versions include the following:

- Virtual Box 5.1.2
- VMWare Fusion 8.1.1

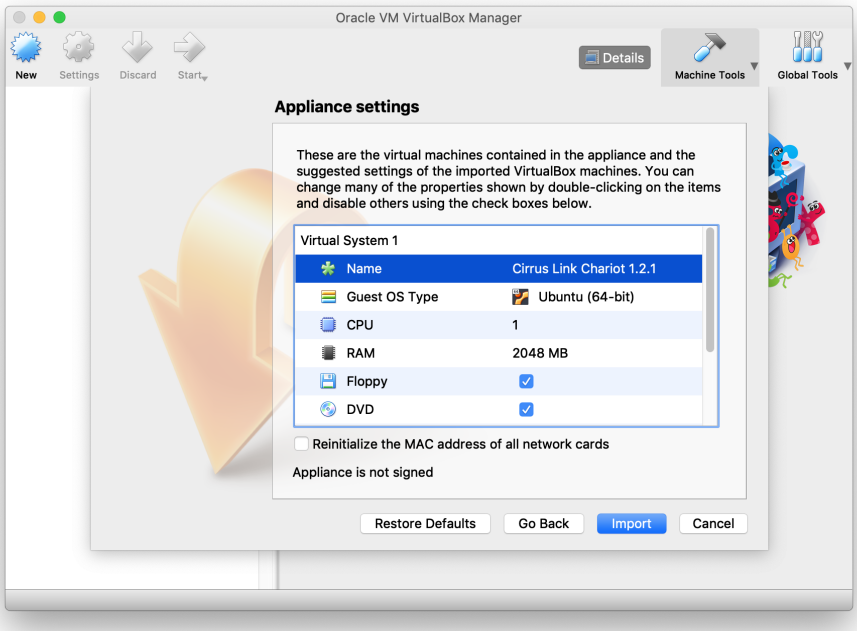
Installing Chariot MQTT Server:

Installation of Chariot MQTT Server is dependent upon the VM Manager being used. Below shows basic instructions for the various tested managers. First you will need to unzip the Chariot_MQTT_Server-latest.zip file to access the Cirrus Link Chariot_*.ovf file.

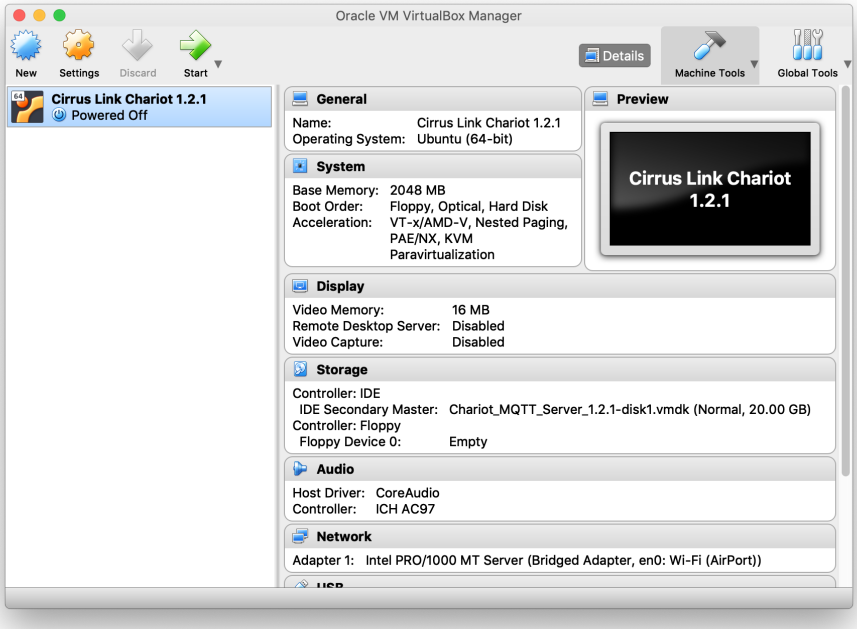
- **Installing Chariot MQTT Server into VirtualBox:**
  - First, open VirtualBox



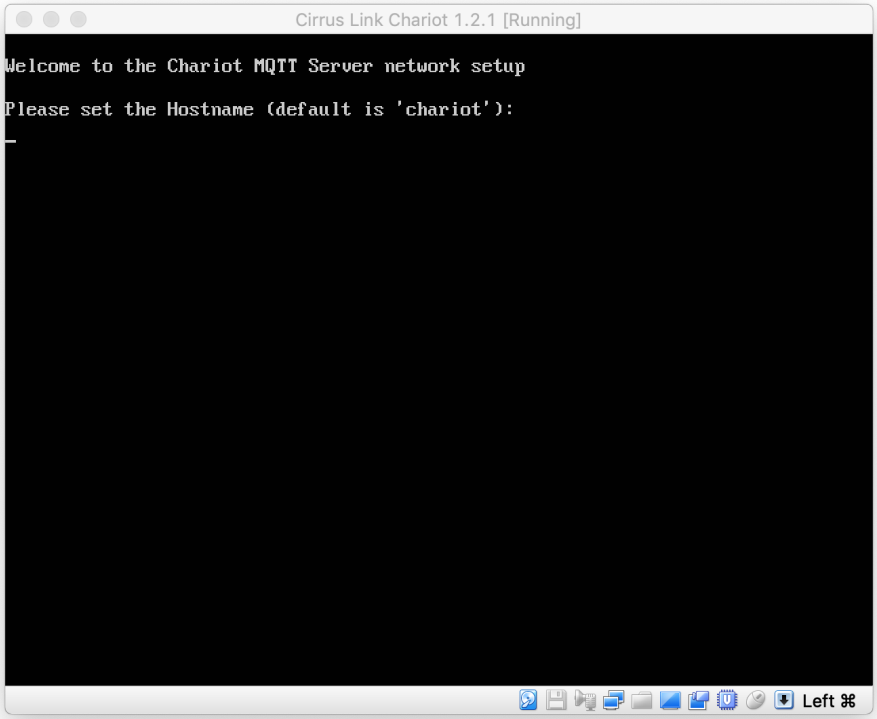
- Now, select 'Import Appliance...', browse to Cirrus Link Chariot_*.ovf (which came from Chariot_MQTT_Server-latest.zip) and select Open. This will show the following window:



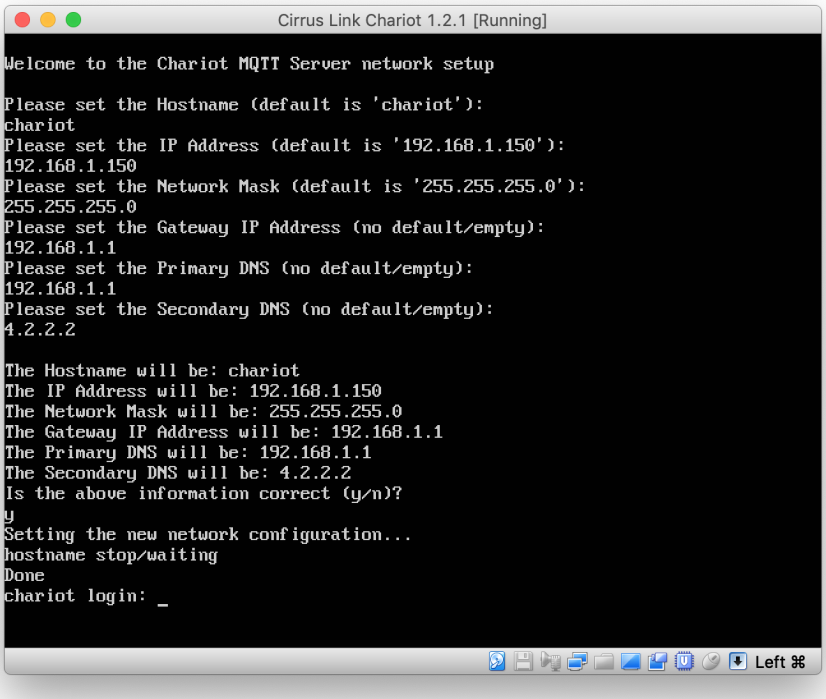
- Change the Name to 'Cirrus Link Chariot' and select 'Import'. The VM will take a few minutes to import depending on your computer. When this is complete, you will see the new VM in the list as shown below. Note a machine with 4 CPUs and 8 GB of RAM is the recommended minimum.



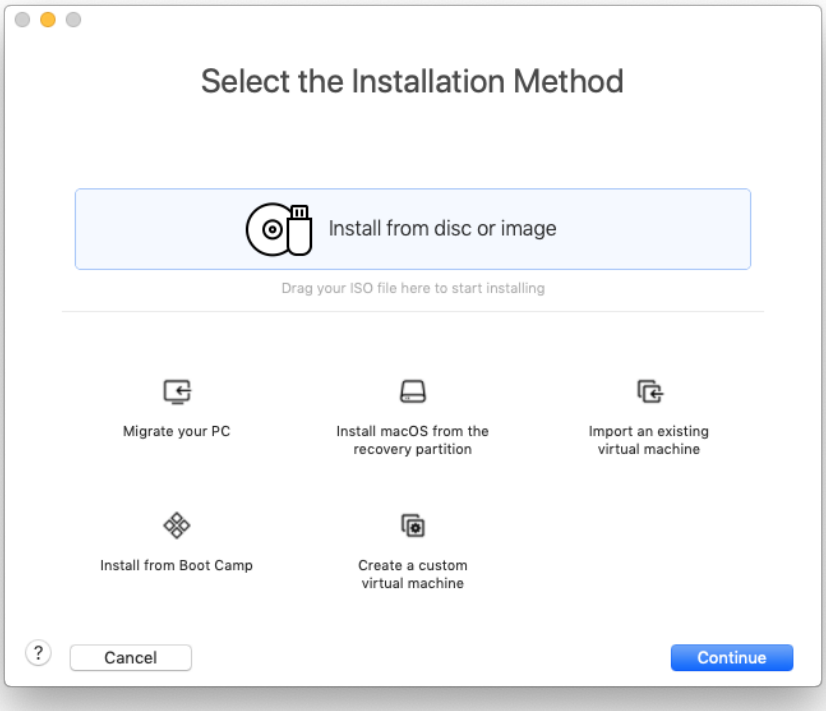
- Simply click the Start button to start the VM. You may get an error mentioning the lack of a configured sound card. You can ignore this. You may also get some messages talking about keyboard capture and mouse pointer integration as shown below. These can also be ignored. One you are on the Welcome screen below you can begin setting up the network configuration.

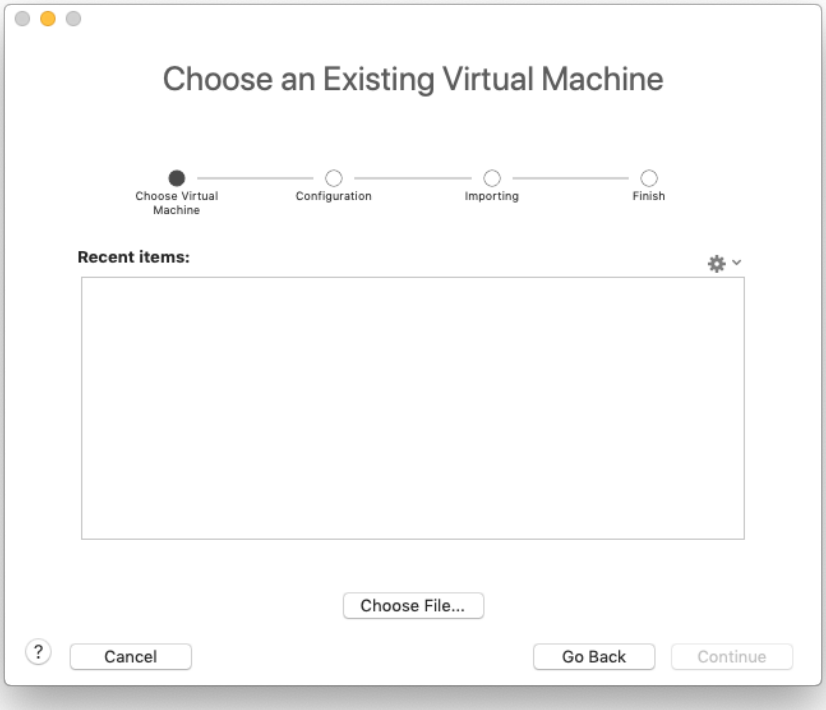


- Configure the following:
  - Hostname
  - IP Address
  - Network Mask
  - Gateway IP Address
  - Primary/Secondary DNS
- Once you see the following, the Chariot MQTT Server is up and running.

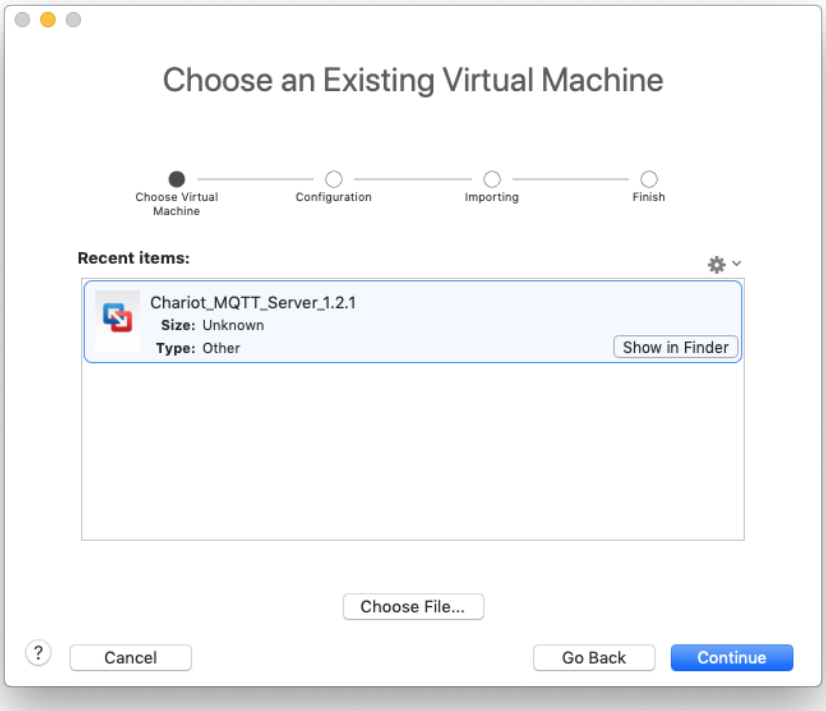


- **Installing Chariot MQTT Server into VMWare Fusion:**
  - First, open VMWare Fusion and select 'Import an existing virtual machine'

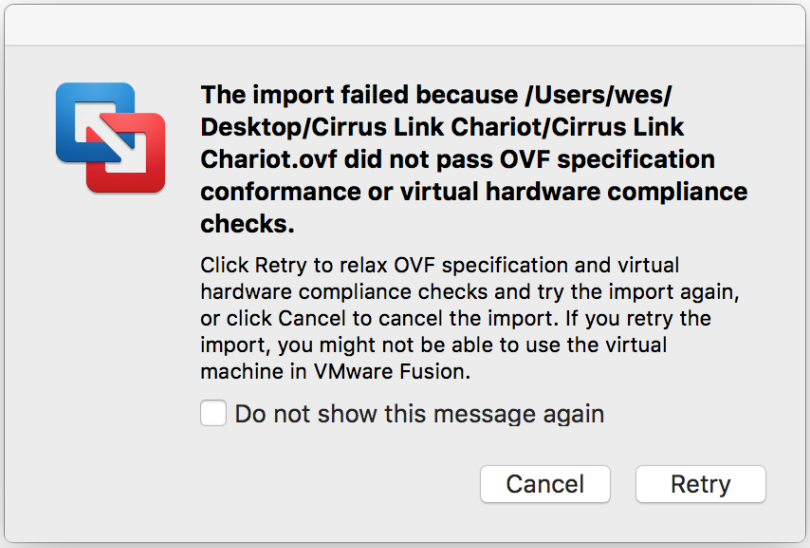




- Select 'Choose File...' and browse to Cirrus Link Chariot_*.ovf (which came from Chariot_MQTT_Server_1.2.1.zip) and select Open. This will show the following window.

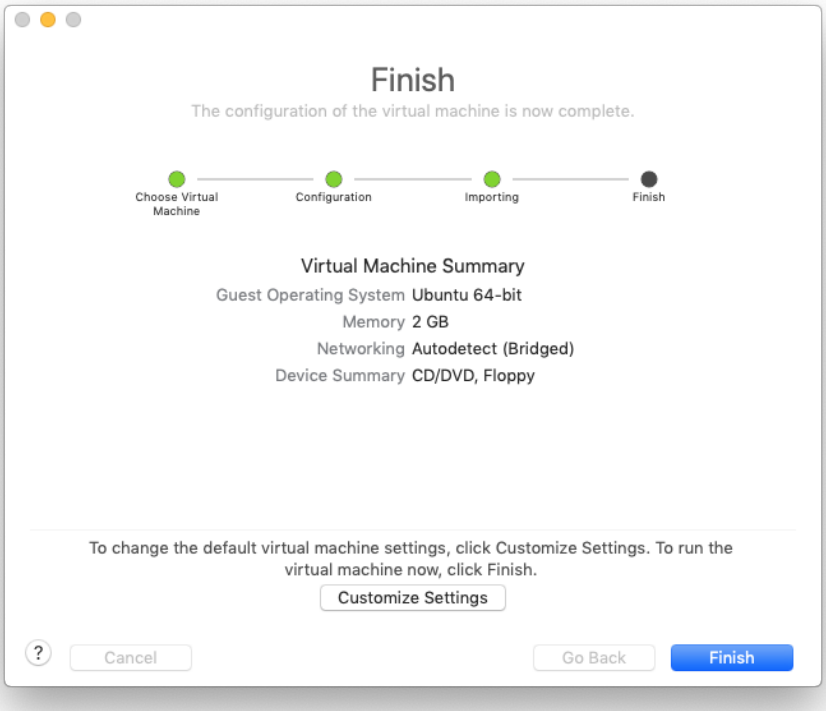


- Click 'Continue' and then click save to save the new Virtual Machine to your disk. At this point, you may get the following error. If so, simply click 'Retry'.

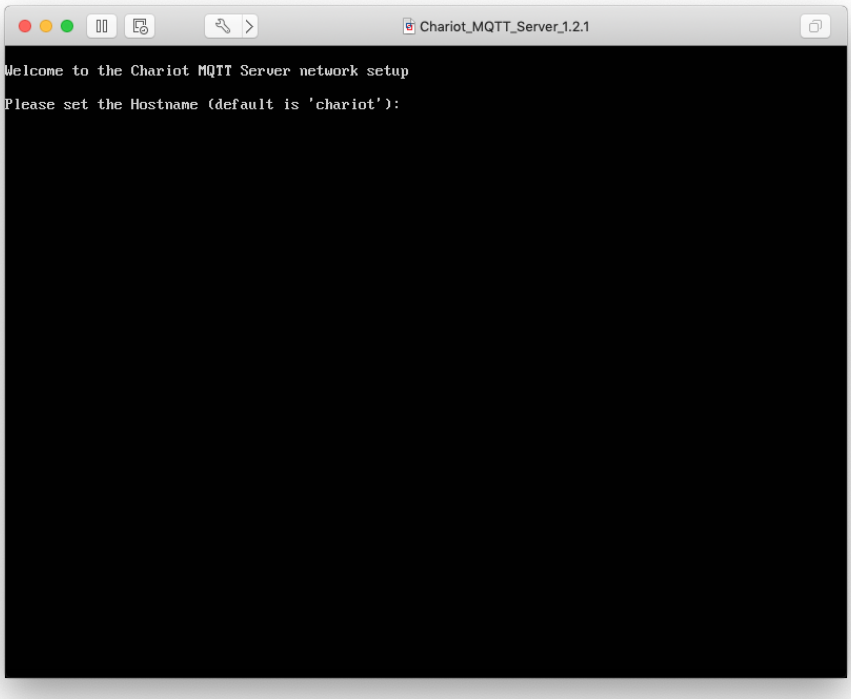


- At this point, the Chariot MQTT Server VM will be imported into your computer. This will take a few minutes.

- Once imported, you will something similar to the following. Click Finish to finalize the import.



- At this point you can start the VM. Once you see the following, you are ready to configure the network as described above.



Using Chariot MQTT Server:

At this point the Chariot MQTT server is up and running with it's initial network settings. In order for you to be able to browse to it, the host computer OS must be on the same network. Once you are on the same network, you can browse (**NOTE: Internet Explorer is not supported for connecting to the Chariot MQTT Server web front-end. Please use Chrome or Firefox.**) to Chariot MQTT Server by going to the IP Address that you configured via HTTPS (for example: https://192.168.1.150). For configuration and usage instructions, visit this page.