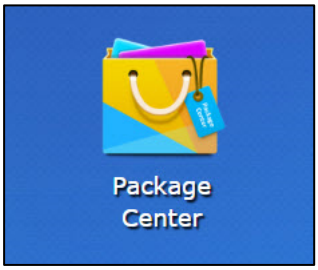
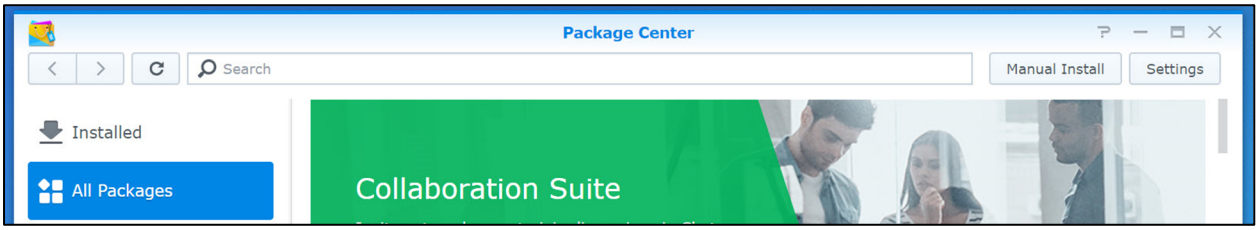
Installing Docker on a Synology:

(Applicable models can be found here: https://www.synology.com/en-us/dsm/packages/Docker)

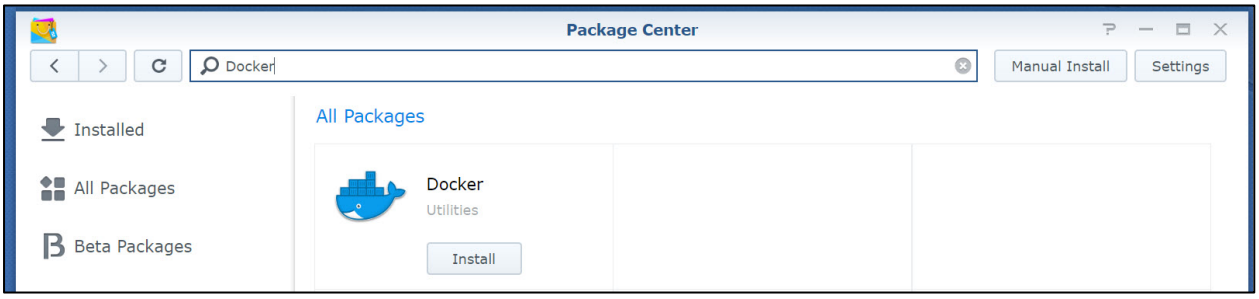
Begin with logging onto the web interface of your Synology. Once you are logged in, look for the 'Package Center' icon (shown below) and open it.



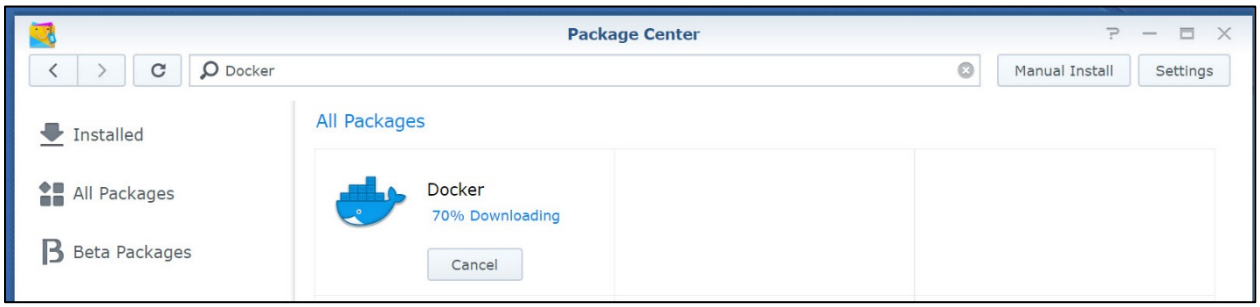
Once you have Package Center open, you will want to use the search bar at the top of the window to search for the 'Docker' package.



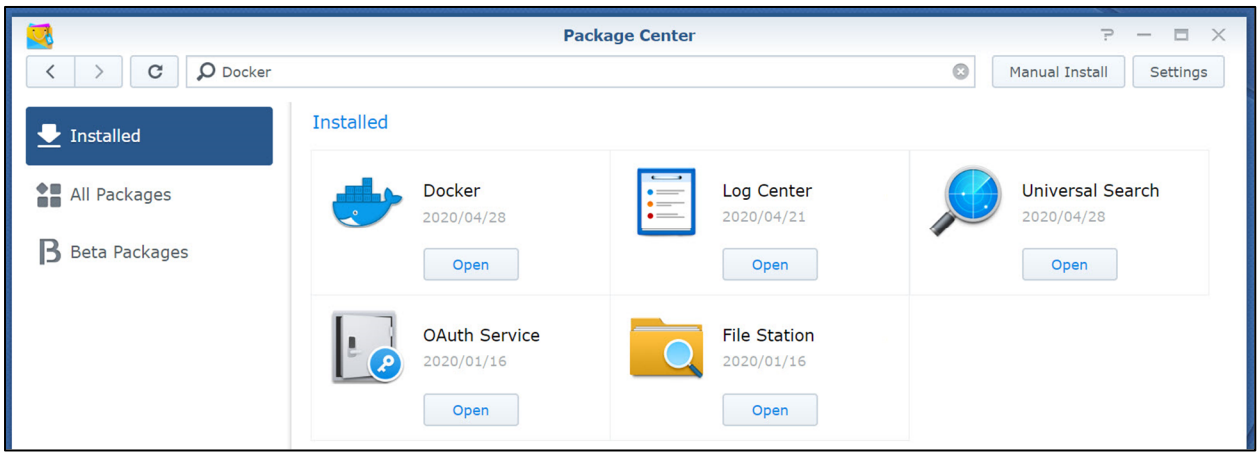
Type 'Docker' into the search bar, and you should be presented back with the package to install. (If the package does not appear, you may have a Synology model which is not supported. Please check at the URL at the top of this guide)



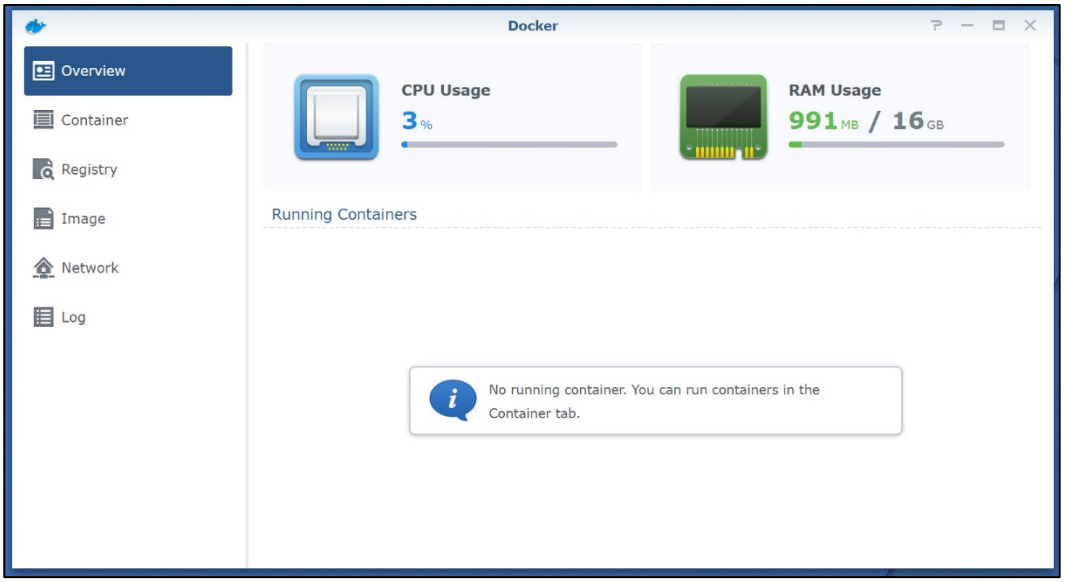
After you click ‘Install’, the package will begin to download and install, the icon will update with this progress:



After the package installation has completed, you will see Docker listed in your ‘Installed’ packages. You should also be able to connect to your Synology via SSH at this point to run Docker commands at the command line.

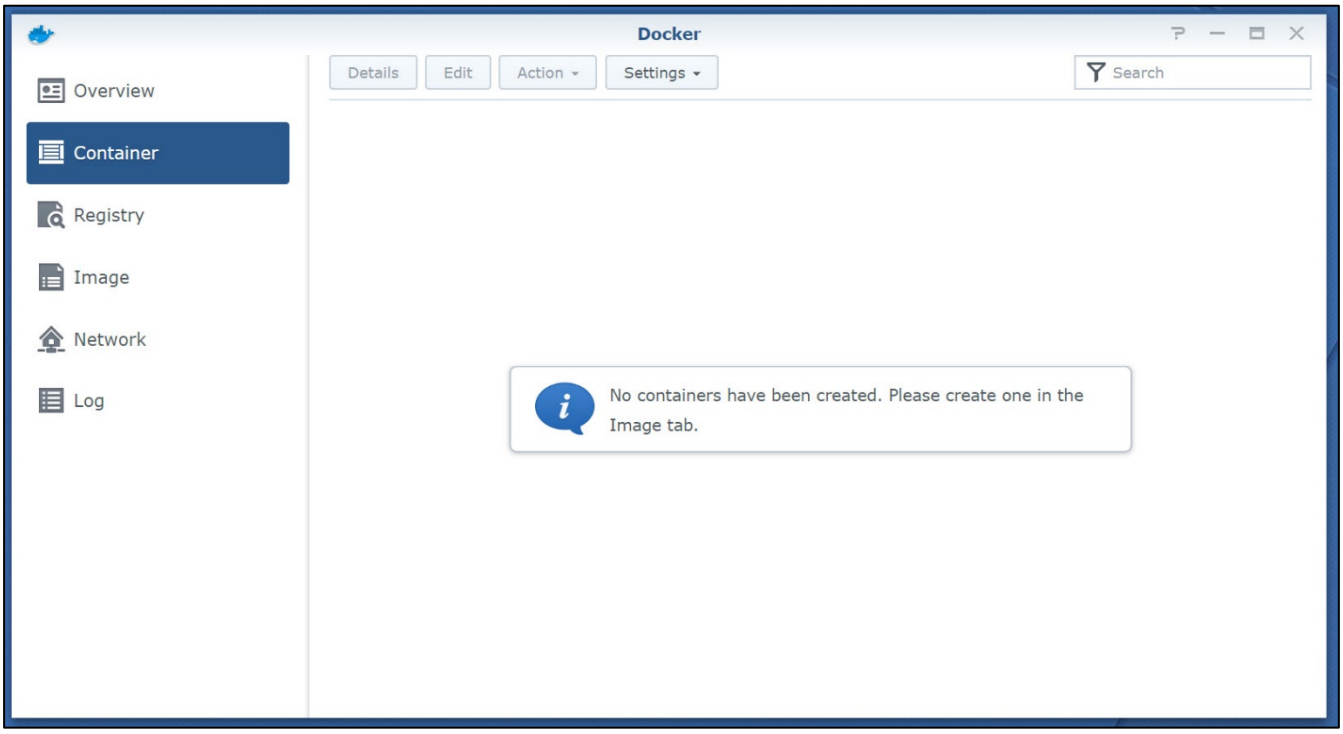


When you open Docker, you will be presented with this window:

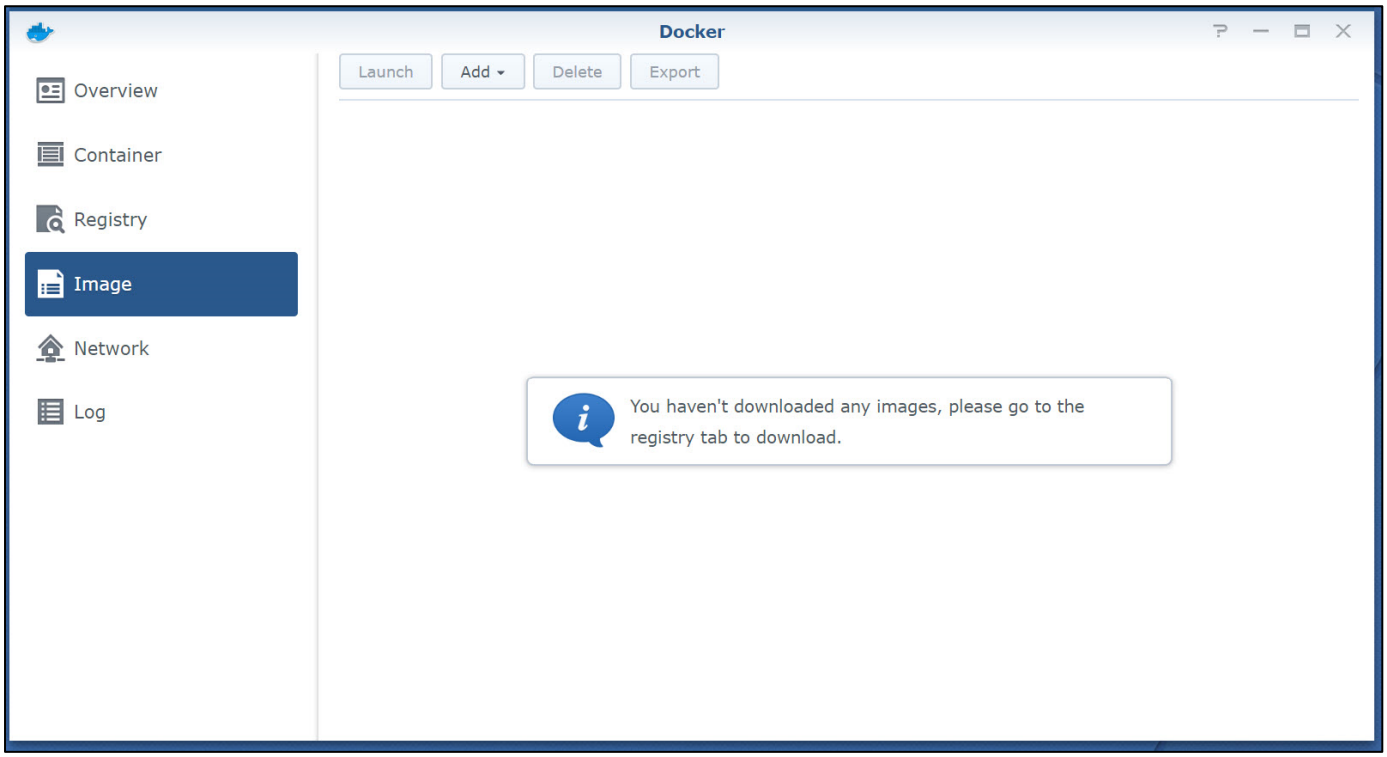


Interactive First Container Setup:

Now that we have Docker installed, it is time to create our first container. Let's just go to our 'Container' tab and create one.

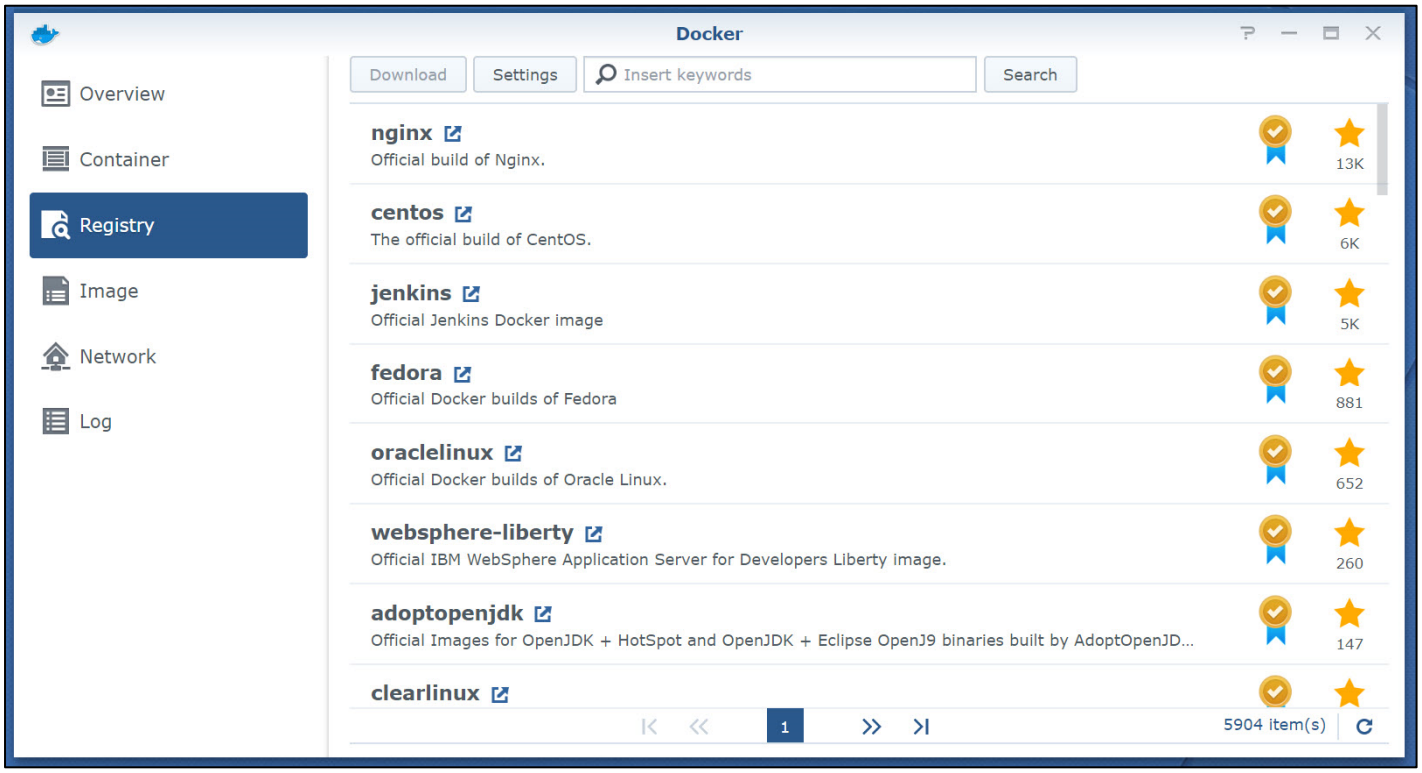


Well, maybe not. Apparently, we need to go to the 'Image' tab first to create it. Let's open that now.

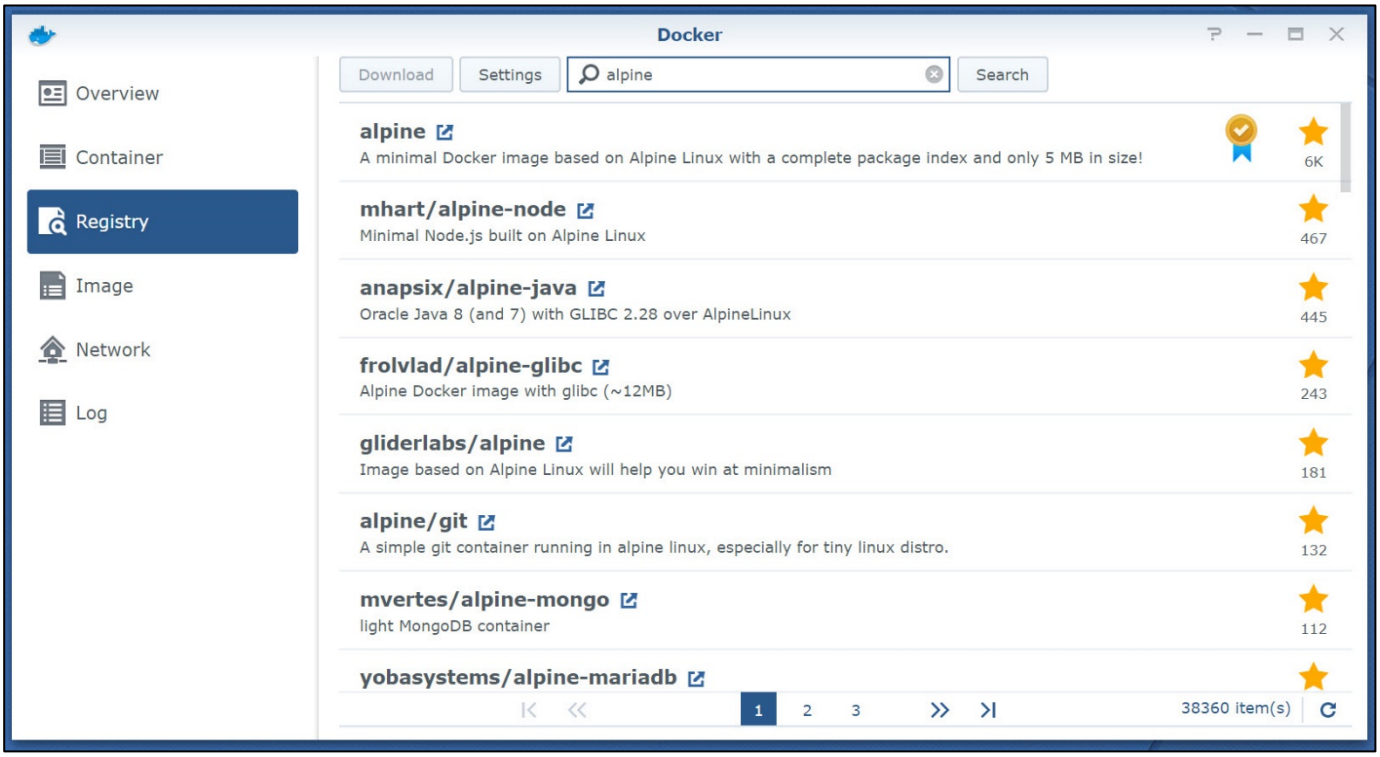


OK, so now we should head over to the ‘Registry’ tab to download an image. Onwards!

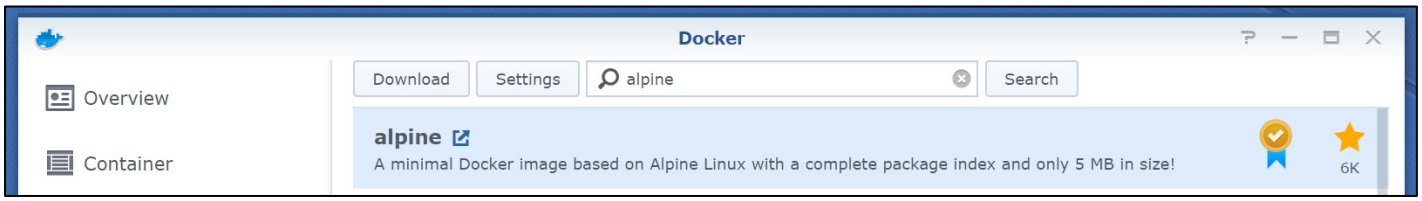
Once we open the ‘Registry’ tab, we will be presented with a list of popular container images, and the search bar which we will use to find our image.



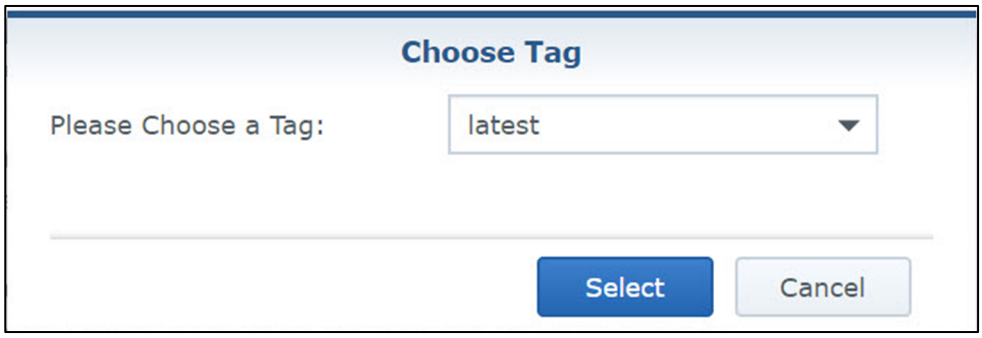
Within the search bar, enter ‘alpine’ to find our easy to use simple Linux container.



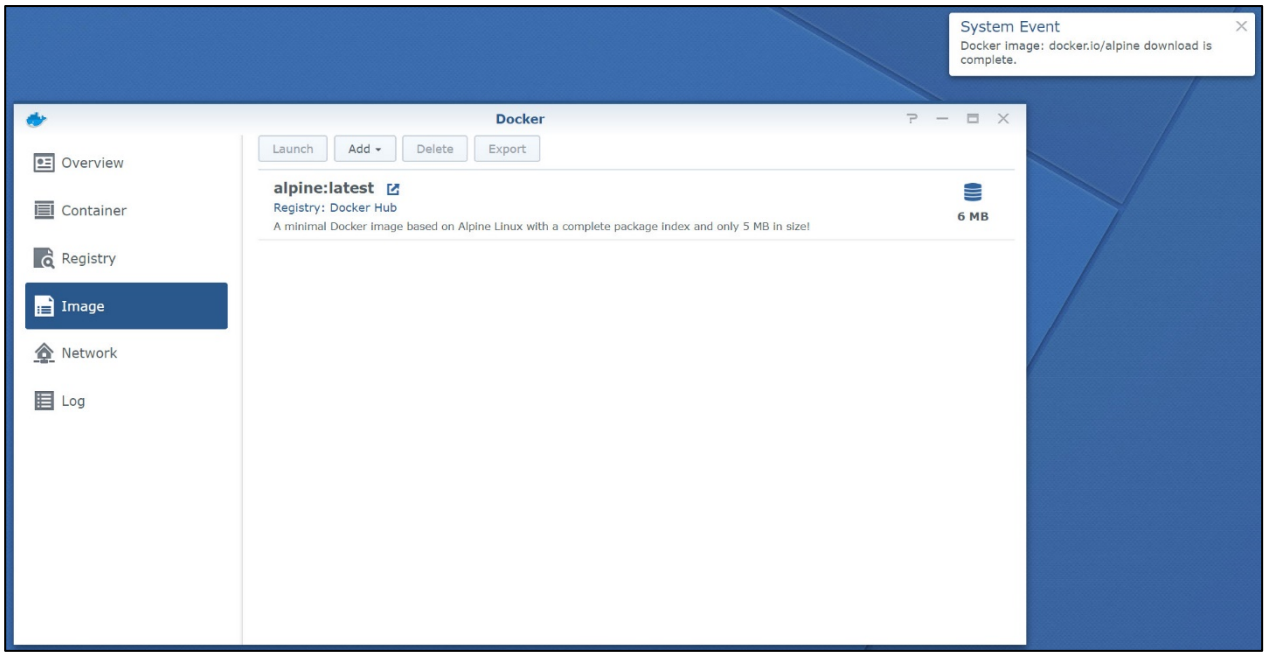
Click on the image to select it, and we can then click the 'Download' button above to pull down the container image:



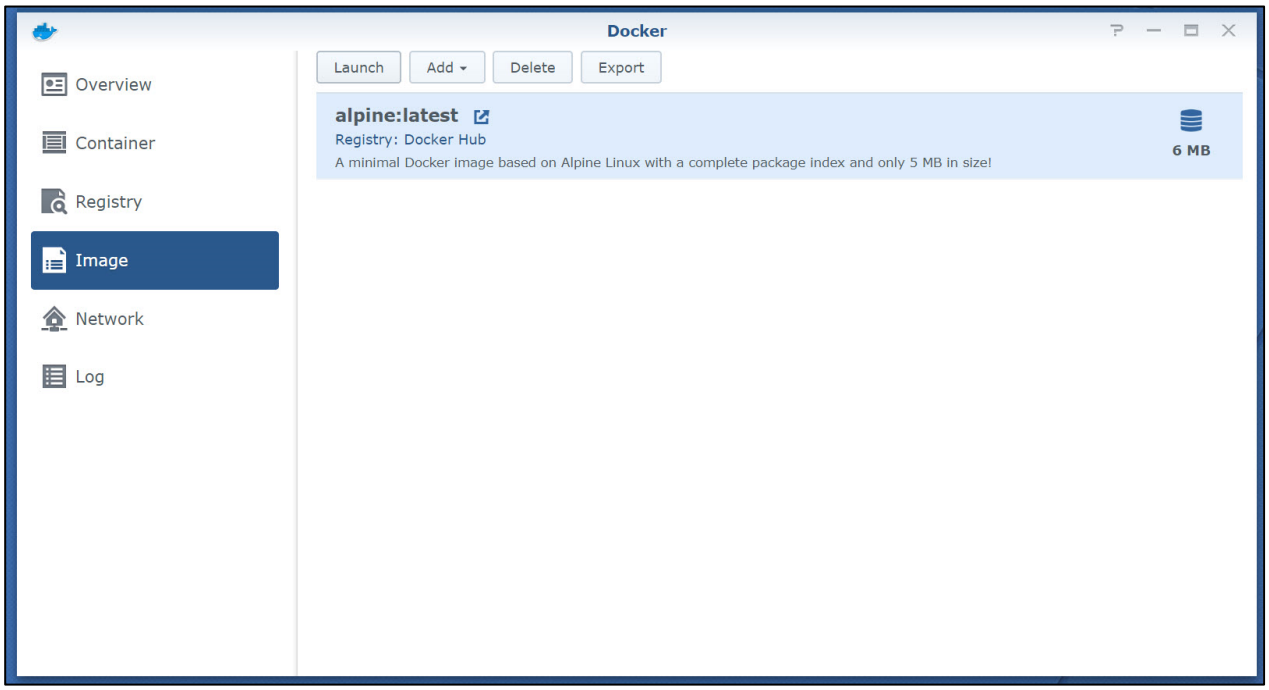
Once we click the 'Download' button, we are prompted to choose a tag (this is essentially the version of the container to pull). Since we have no specific version requirement, we will continue with the default of 'latest' and click 'Select'.



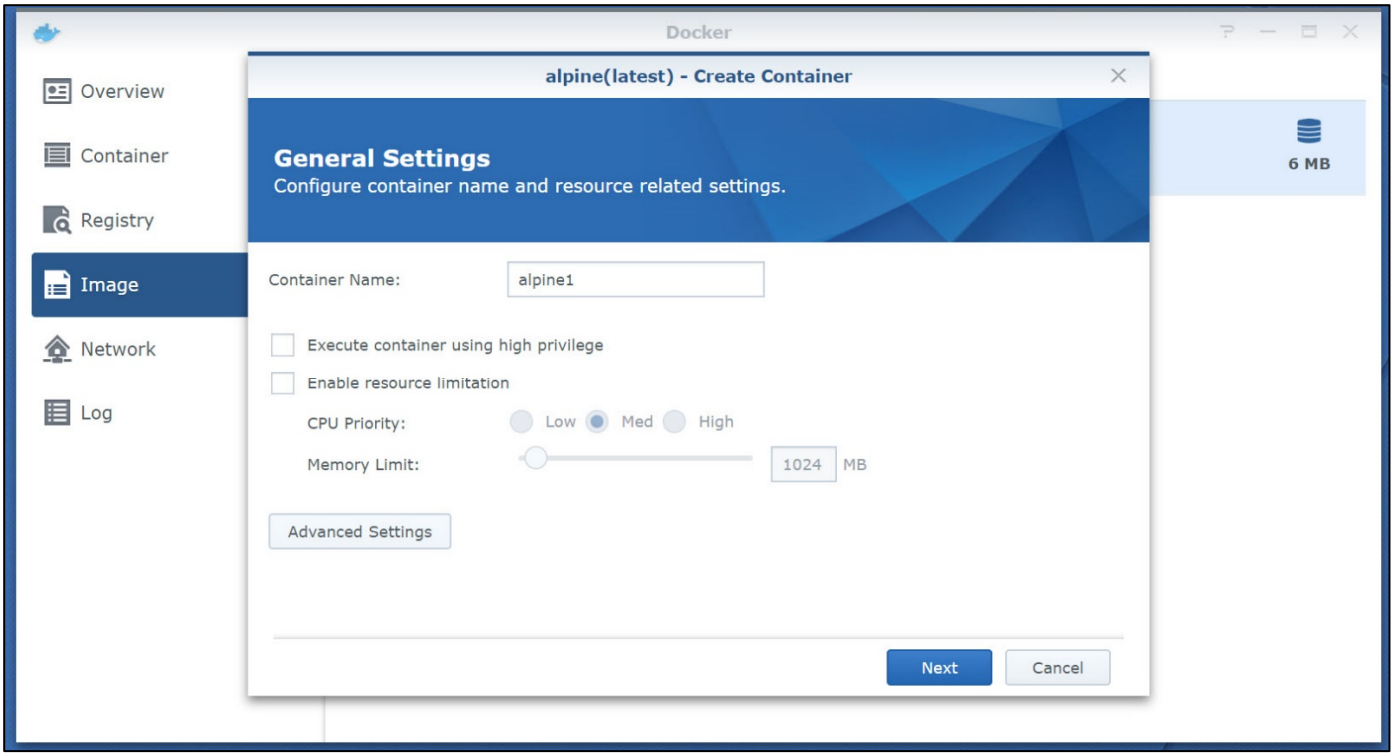
When the download begins, we will see the main Docker application window again, and our image will be shown once downloaded. Synology will also display a System Event notification about the download being complete.



With our download complete, we can launch a new container from our image. Select the image and click the ‘Launch’ button above.



The ‘Create Container’ wizard will now launch to let us enter any specific settings for our container. For now, we will keep default privileges and no resource limits.



We also have the option to click the ‘Advanced Settings’ button and we will be presented with additional settings tabs for these additional types of settings:

Advanced Settings: auto-restart of the container, desktop shortcuts

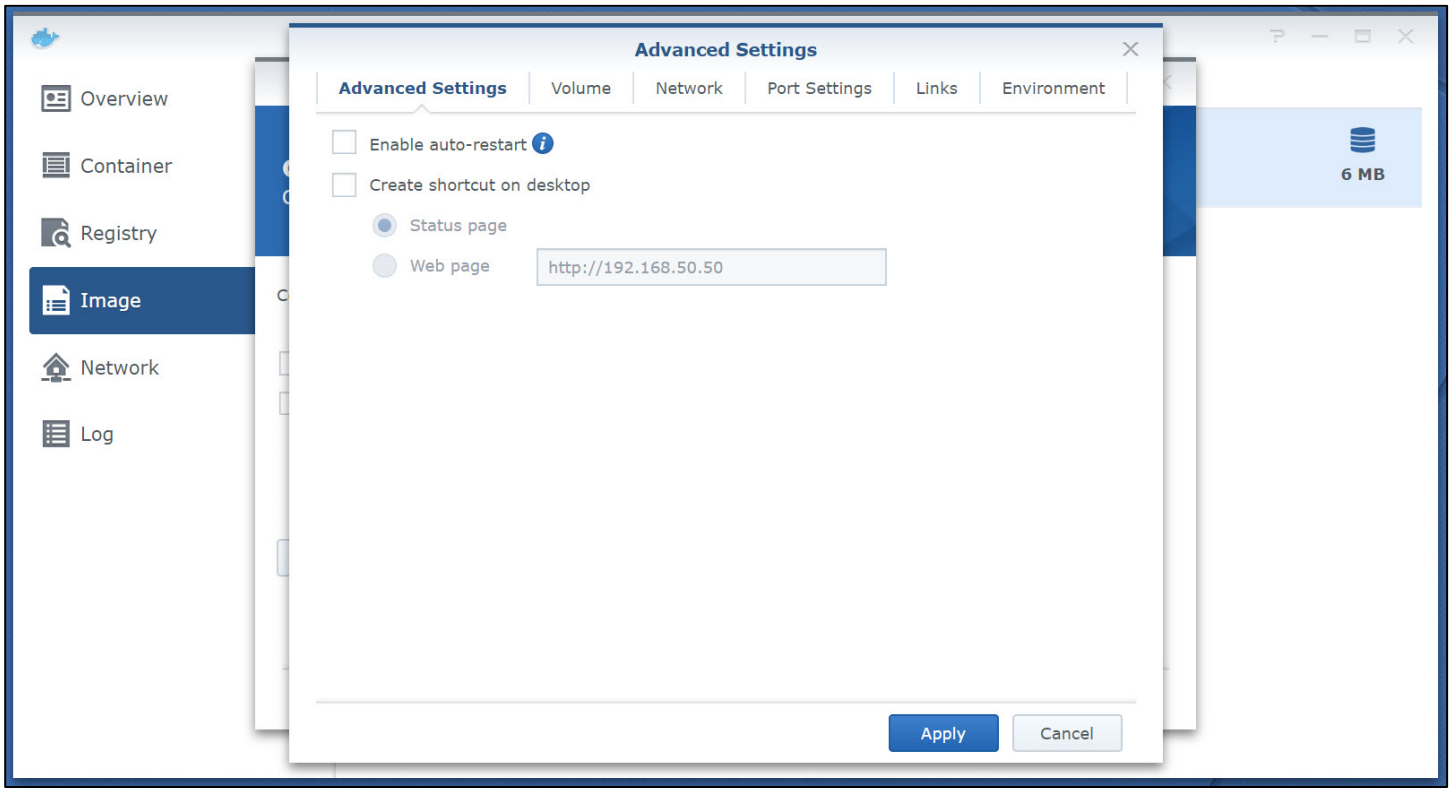
Volume: Add a file/folder as a mount path (as read only or read/write)

Network: Add network connections for container

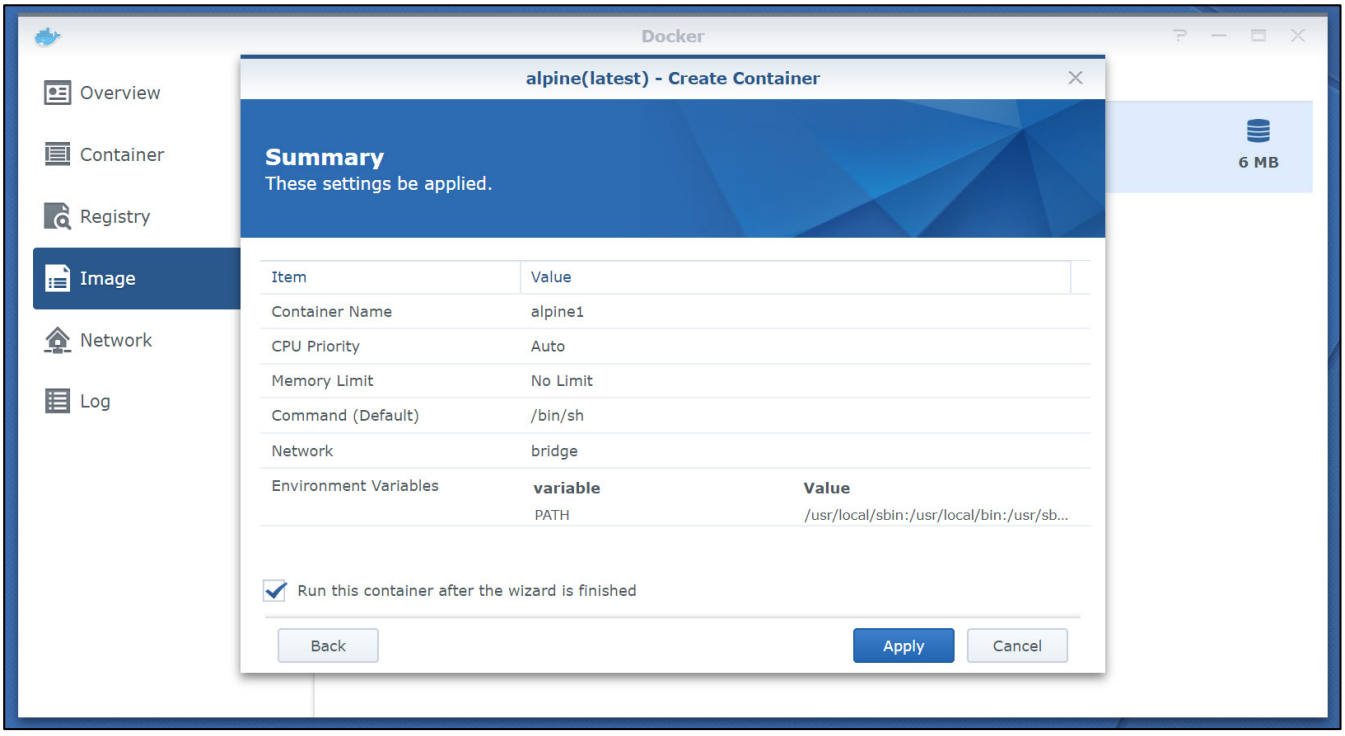
Port Settings: Add port bindings from host to container

Links: create aliases for other containers

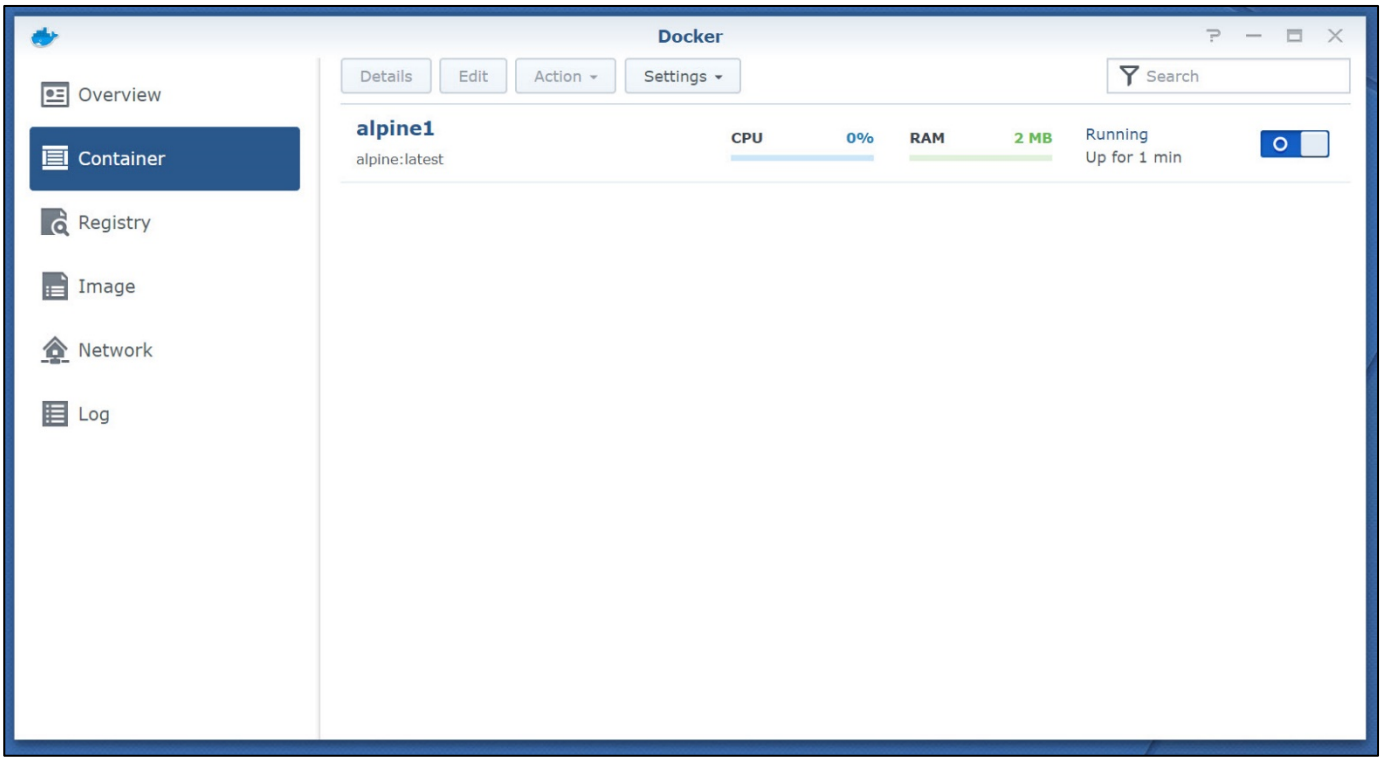
Environment: Set environment variables and execution commands



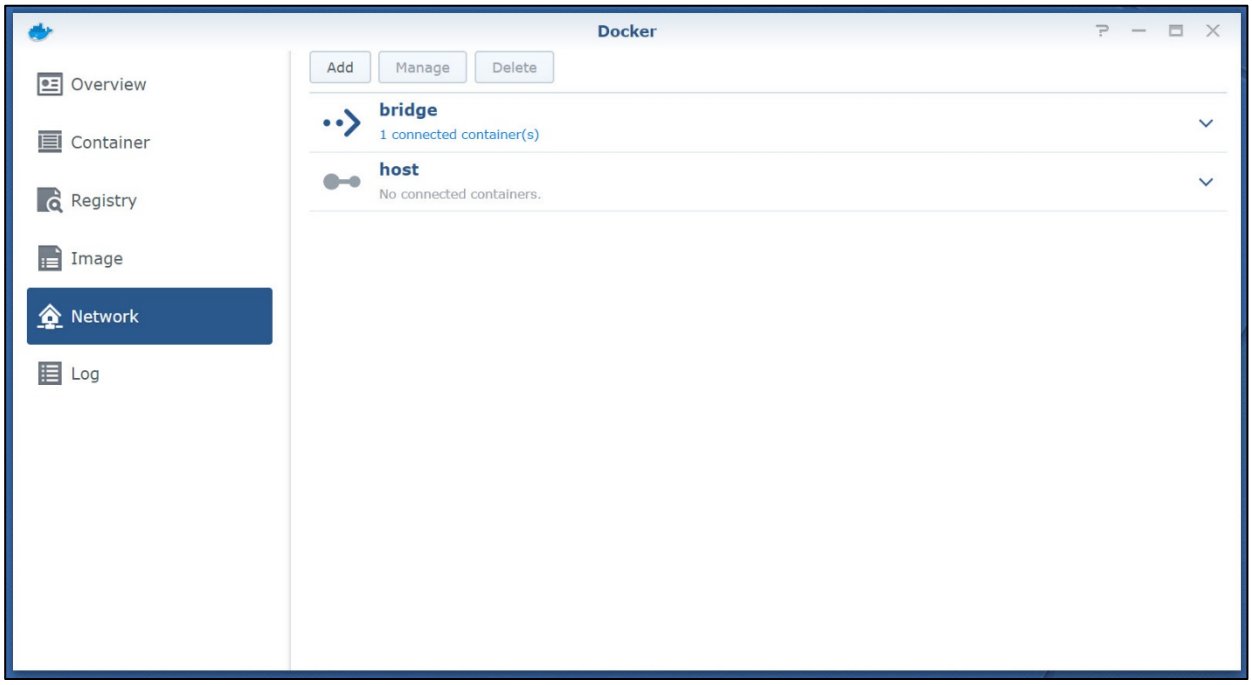
Once we have selected our settings (defaults for this walkthrough), we are presented with the 'Summary' page of the wizard. Be sure to leave the 'Run this container after the wizard is finished' setting checked and click 'Apply'.



After the wizard has completed, we will now see our container has been created and is currently running:



If we select the ‘Network’ tab, we will also see that we have one container connected to our Docker ‘bridge’ network:



With this, we have completed the installation of Docker on our Synology, and interactively created our first container. I hope this helps you to get started with Docker & containers.