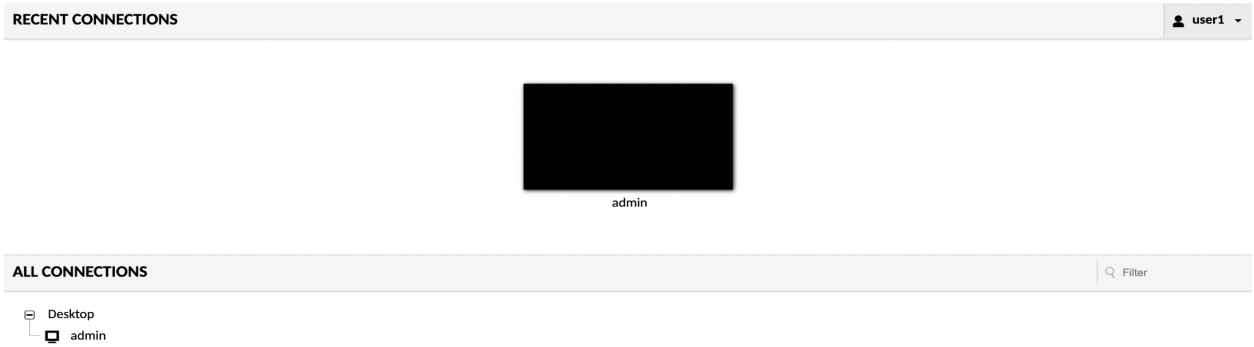
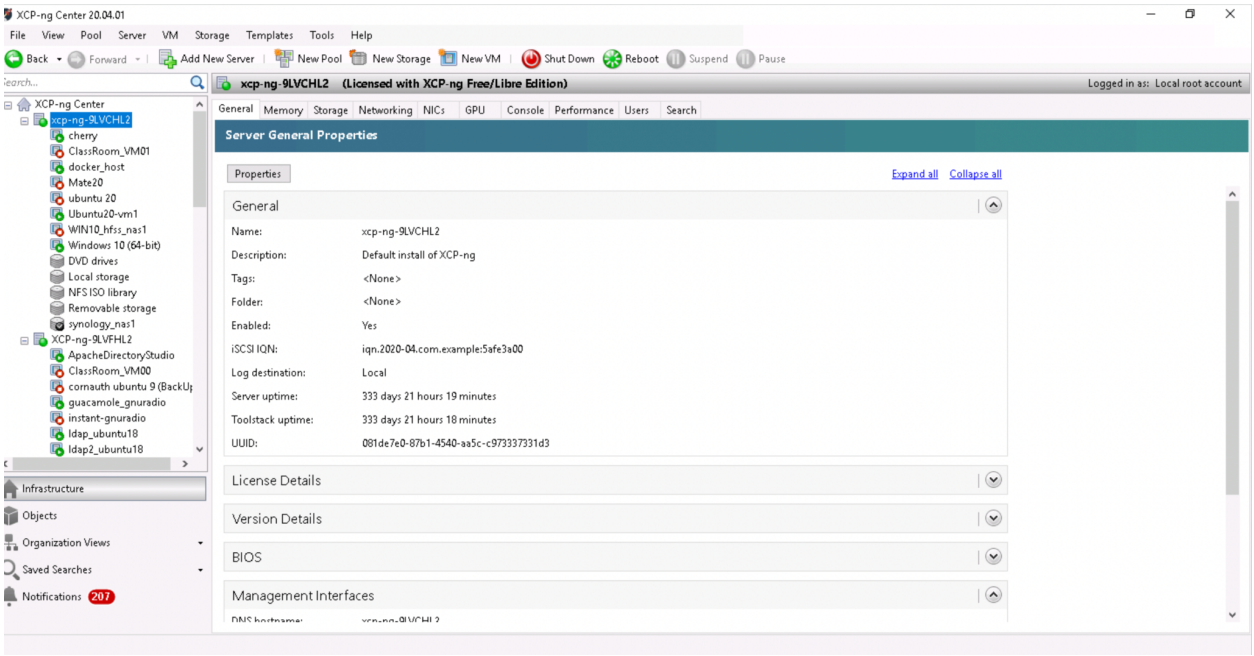
Steps to Create a new Virtual Machine XCP-NG Server

1. Login to the guacamole server http://kermit.wireless.vt.edu:8080/guacamole/#/
   Credentials: user1
   Password: <shared through email>
2. A screen appears to select the admin VM.

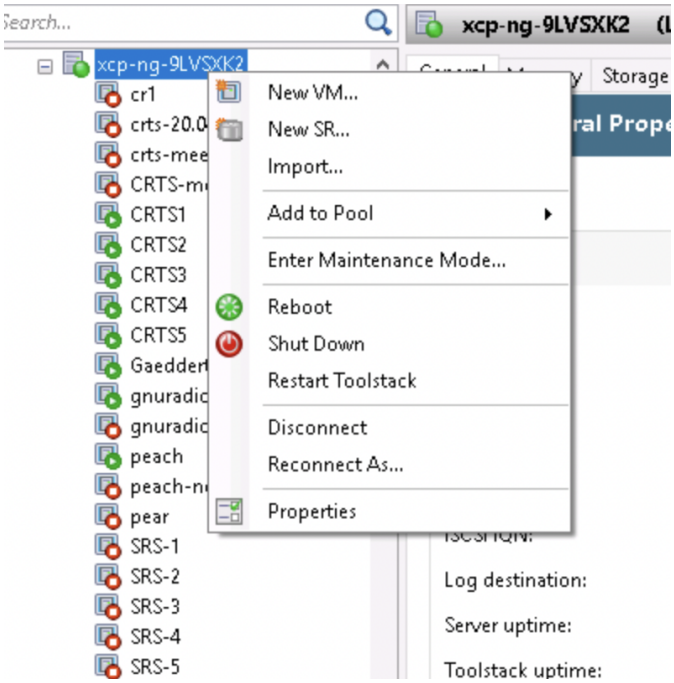


3. You will be redirected to the testbed admin virtual machine.

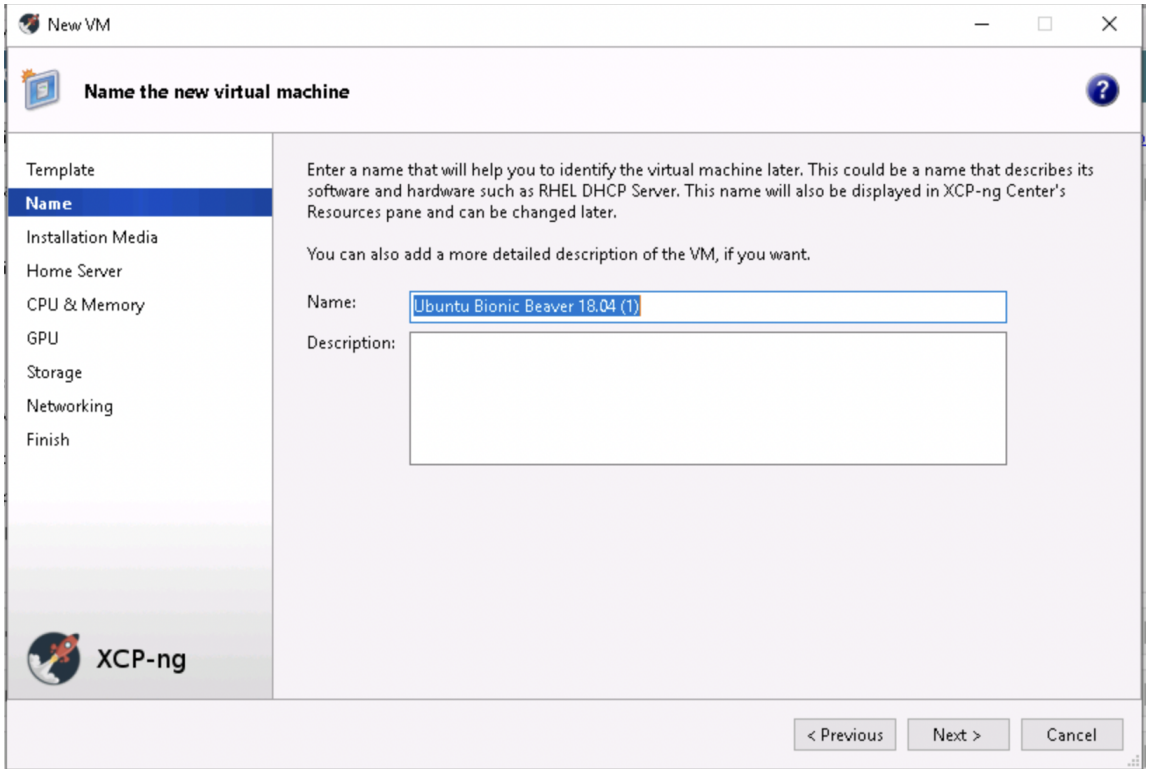
4. Open the xcp-ng center 20.04.10 application.



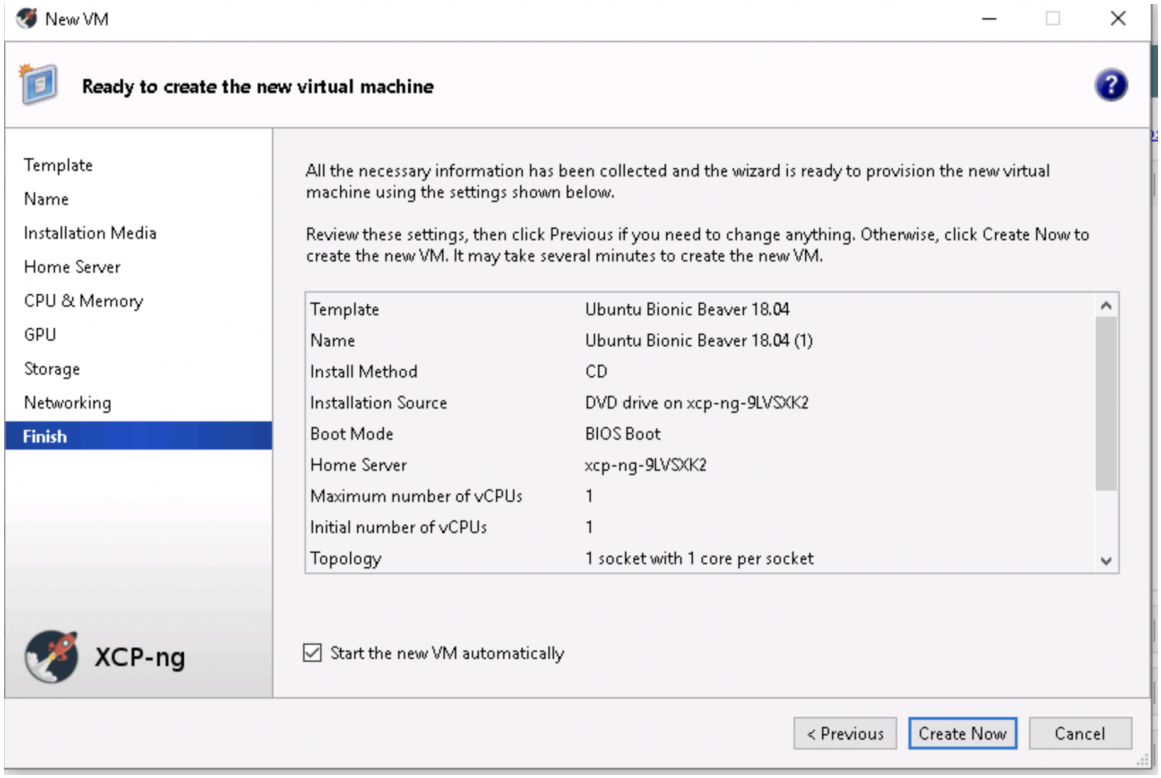
5. Select the xcp-ng-9LVSXK2 server. It will have some virtual machines created. To create a new virtual machine right click on the server and click on New VM..



6. Complete the template form by selecting the OS and providing the appropriate configurations as required.

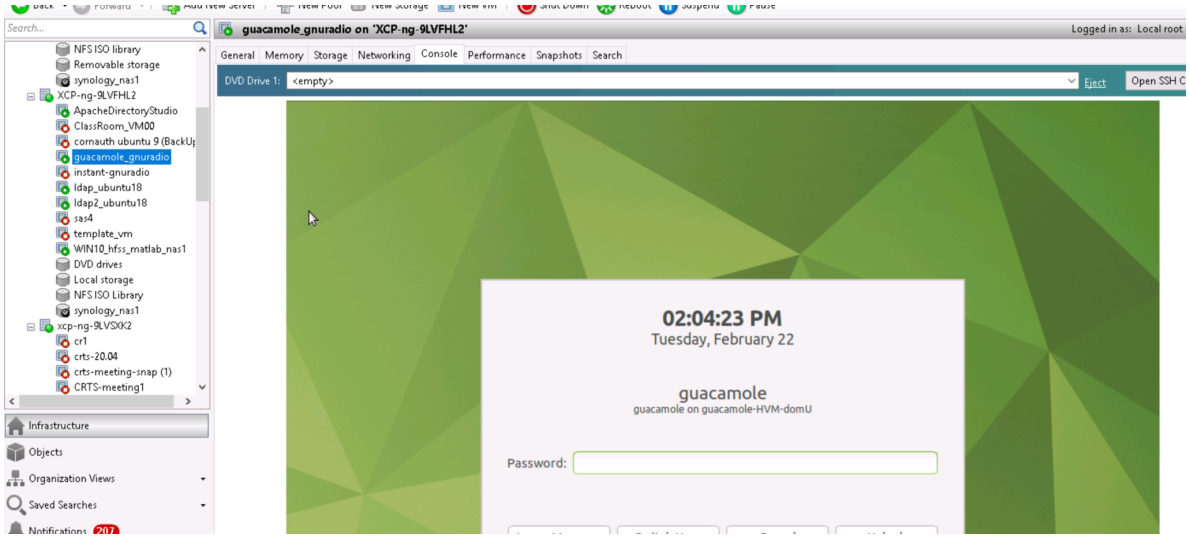


8. Finish the setup and click on Create Now. This will create a virtual machine.

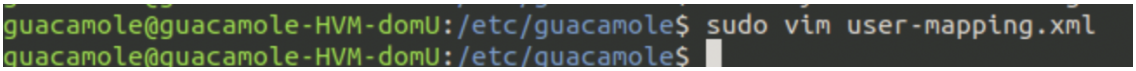


Map the VM to the guacamole server to access from Web UI

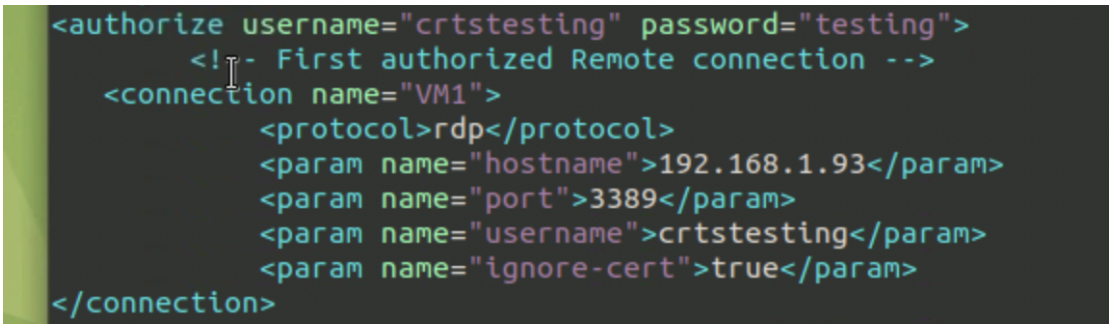
1. Go to the xcp-ng 9LVFHL2 server which has an existing guacamole server named guacamole_gnuradio. You can also create a new guacamole server that has different steps.



2. Login to the guacamole server by entering the password *gnuradioStudent.*
3. Open terminal and open the user-mapping xml file using the command: sudo vim user-mapping.xml



4. Add the configurations of the VM in the xml file as shown below:



5. Save the file and exit.
6. Restart the VM.

Connecting USRP network to VMs:

1. Adding vms to the radio subnet step is to first make sure the vm has an interface on the x310-bond network,
2. then copy the netplan configuration from a similar vm (most of the time it's just a manual ip on eth1) to your current vm.
3. Make sure the ip in your copied netplan conf is unique and not overlapping a radio.

```
# Let NetworkManager manage all devices on this system
network:
  ethernets:
    eth0:
      dhcp4: true
    eth1:
      addresses:
        - 192.168.40.80/24
      mtu: 9000
  version: 2
  renderer: NetworkManager
~
~
~
~
~
```