Getting started on ORION

ORION

Owl Research Infrastructure Open Nebula (ORION) VM Pool on Rice Campus is, in essence, a linux virtual machine farm.

ORION offerings are comprised of:

- Virtual Machines of various Linux OS' and software packages. Please check our catalog for our offerings via the ORION web interface once you've been given access.

We offer the following Virtual Machine support levels:

1. **Full admin:** An IT Systems Administrator takes full responsibility for systems administration of the VM.
2. **Customer admin:** IT assumes no responsibility for stability of the operating system.

To obtain access to ORION please apply for access as you would for any other CRC computational resource and select ORION as that resource. Once your account has been approved by your sponsor you can access login via your web browser either on campus or via VPN and connect to: https://orion.rice.edu/ via your netID and netID password. The web interface is not accessible directly from the Internet.

Please note we are available for discussions if our current offerings don't meet your needs. We may be able to accommodate you. Please contact us via ticket and reference ORION.

LOGIN to VM on ORION

Typically when you have instantiated a VM it will be accessible via your SSH key and your netID.

To ensure your SSH key is present on your VM you must have generated a SSH public and private key. This will depend on the operating system you are using e.g. Linux, Mac, or Windows.

1. Login to ORION using your web browser using your netID and netID password.
2. On the top right-hand corner click on your netID.
3. Click on Settings
4. Click on Auth
5. For the Public SSH Key option click on the edit button and paste your Public SSH key
6. If you have a VM already running you will need to reboot the VM to affect this change.
7. All instantiated VMs after you have added your Public SSH key will have it added to your VMs if it is configured to do so. Templates provided by the CRC will do so.
8. You can then login via your SSH key and use your netID as the login account.

RECOMMENDATIONS

- Users of ORION are expected to maintain copies of their data. Please contact us if you need help with that.
- Generally, VM images should mount user data external to the VM. We have the Research Data Facility for that purpose and configurations for facilitating that.
- Generally, custom software should exist external to the VM images.
- Images of less than 10GB is preferred
- There are no backups of images or user data contained with VM images