1. Introduction to Red Cloud
   Red Cloud is a subscription-based cloud computing service that provides root access to virtual servers and storage on demand.

2. Accessing Red Cloud
   1. Go to redcloudsecure.med.cornell.edu.
   2. Enter an account name.
   3. Log in with your CWID and password.
Dashboard

The dashboard is your primary navigation location. Clicking on any of the icons will take you to the function associated with that icon. Note: The “Buckets” function is not available.

You can also open the sidebar by dragging the right edge to the right. This will show more navigation options.
Instances

You can launch an instance by clicking **Instances** in the sidebar or by clicking **Launch Instance** on the dashboard.
On the “Launch new Instance” page, you must select an image you want to use. Click the **Select** button to choose.
Under the “Details” tab, assign the number, name, instance type, availability zone and tags for the instance.

Note that under “Instance type,” you have a dropdown window to assist you in your choice.
The “Availability zone” field also has a dropdown window.

Under the security tab, select **Create keypair**.
In the pop-up window that appears, enter the keypair name and click **Create and Download**.

Click **Create security group**.
Enter the security group name and description. Select a protocol, and click **Create Security Group**. You may add more than one protocol.
Under the “Advanced” tab, check **Delete on terminate** to indicate you don’t want data stored once the instance is terminated. This will save on storage expense. Click **Launch Instance**.
You will see a window showing that the instance has been launched. The status may show as “pending” for a few moments.

Under “Actions” click the three dots to see your options for your instance.
One of your options is to stop the instance.

You will see a window asking you to confirm that you want to stop the instance.
You will see that the status shows that the instance has been stopped.

You can restart a stopped instance.
You can also terminate an instance.

You will see a warning about terminating the instance. Note that you cannot restart a terminated instance. Also, if you elected to eliminate all data on termination (see above), your data will be deleted.
Elastic IP Addresses
You can allocate elastic IP addresses by clicking Elastic IP Addresses in the sidebar.

You will see a list of public IP addresses you can allocate. Click the three dots under “Actions” to see the dropdown window for associating the IP address with an instance.
A pop-up window will allow you to choose the instance you want to associate with the IP address.

Here we see several instances that have been associated with IP addresses.
You can also disassociate an instance from an IP address.

Release to Cloud

Under “Actions,” you may elect to release the address to the cloud.
You will see a pop-up window where you can verify that you want to release the address to the cloud.
Volumes

Select **Create Volume** from the Dashboard

Select **Create New Volume** on the screen that appears.
Name the volume, choose whether you want to create it from a snapshot, give the size of the volume and select the availability zone. The click **Create Volume**.

You will see that the volume is available. Under the “Actions” button, you may choose to attach the volume to an instance.
Designate the Instance and the device and select **Attach Volume**.

You will see that the volume is attached. Under “Actions” you can choose to detach it.
Snapshots

Select **Create Snapshot** on the dashboard.
Select **Create New Snapshot**.
Enter the name of the snapshot, the volume you want to use and a description. Then click **Create Snapshot**.

You will see that the status is “Completed.”
Load Balancers

Select **Create Load Balancer** from the Dashboard.
Select **Create Load Balancer**.

Under the “General” tab, name the load balancer.
Select the protocol and click **Next**.
Under the “Instances” tab, click the boxes next to the instances you want to add.
Under the “Health Check & Advanced” tab, check that you have the correct protocol, port and path. Then click **Create Load Balancer**.
You will see that the load balancer has been created.

<table>
<thead>
<tr>
<th>NAME</th>
<th>AVG LATENCY (MS)</th>
<th>UNHEALTHY HOSTS</th>
<th>HEALTHY HOSTS</th>
<th>ACTIONS</th>
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