



Chameleon Cloud Tutorial

Getting Started with Chameleon Cloud

“Cheat Sheet”

Program Solicitation # NSF 13-602

CISE Research Infrastructure: Mid-Scale Infrastructure - NSFCloud
(CRI: NSFCloud)

Getting Started with Chameleon Cloud

<https://www.chameleoncloud.org/docs/getting-started/>

Objectives

In this tutorial, you will learn how to create a Chameleon account and use the Chameleon resource leasing process to create on-demand bare metal servers using the Chameleon user interface.

Tutorial Action	Time Required
Step 1: Register for a Chameleon User Account a. Go to the Chameleon Cloud homepage, located at www.chameleoncloud.org b. Click on “Register” from the drop-down menu in the upper right-hand corner c. Complete the “Contact Information” and “Account Information” forms, when finished, click on “Save Profile”. Then, you will receive an email notification on account creation completion. d. Confirm account using email verification code and Chameleon username e. For GEC Tutorial: give your username to the presenter to be added to the Tutorial Project	10 minutes
Step 2: Create a Sample Project “Sample Tutorial Project” a. Login to Chameleon site, located at: https://chameleoncloud.org/login/ b. Accept the Chameleon User Terms and Conditions c. Create a new project by clicking on the “Projects” tab, then click on “Create Project” d. Accept the Project Lead Terms and Conditions. e. Complete the “Create a New Project” form, and click on “Create Project” f. At this point, the project’s “Allocation” status will be reported as “Chameleon Pending”. Check in regularly to see when your project’s allocation has been approved	5 minutes
Step 3: As a PI for “Sample Tutorial Project” Add Users to the Project a. As PI User, Login to Chameleon site, Located at: https://chameleoncloud.org/login/ b. Click on “Manage your Projects” or the “Projects” tab c. Click on the “View Project” button of the project that you just created in Step 2 d. Type username(s) to “Add a User to Project” Field, then click on “Add user” button	5 minutes

Step 4: Launch a Chameleon Cloud Bare Metal Server

Note: You will not have access to the Resource Provisioning Dashboard until your account has been associated with a Project

4.1) Create Reservation Lease

- a. Login to Chameleon Resource Provisioning Dashboard, Located at ironic.chameleon.tacc.utexas.edu
- b. Go to Reservations → Leases, then Click on “Create Lease” button
- c. Complete the form (note: use future date/time), then click on “Create” Button

4.2) Create or Import Public Key Pair

- d. Go to Compute → Access & Security → Key Pairs
- e. Click on “Create Key Pair” and use it or
- f. Click on “Import Key Pair”
 - o Create local SSH key pair by running “ssh-keygen -t rsa -f cloud.key” command in Linux or use PuTTYgen.exe in Windows
 - o Paste the contents of “cloud.key.pub” file (“cat cloud.key.pub”) into “Public Key” field, then click on “Import Key Pair” button

15 minutes

4.3) Launch an Instance using Public Key Pair

- g. Go to Compute → Instances, then Click on “Launch Instance” button
- h. Complete all of the “Launch Instance” → “Details” form,
 - o Note: Be sure to select your Reservation as the lease created during Step 4.1
 - o Select an Image Name
- i. If you have multiple key pairs, go to → Access and Security tab, select your preferred key pair
- j. Click on “Launch” button

4.4) Assign Floating IP for public access

- k. After Instance is created and launched, click on “Associate Floating IP”, select a public IP and then click on “Associate” button
- l. SSH to server using the floating IP: `ssh [-i cloud.key] cc@“Associated Floating IP”`

Prerequisites

The following prerequisites are expected for successful completion of this tutorial:

- An SSH client (Windows users: download PuTTY and PuTTYgen from here: <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>)
- A basic knowledge of Linux

Additional Document for Full Tutorial Walkthrough

https://drive.google.com/file/d/0B_stGCvNiskmX2Joa3pFQ0Z3YIU/view