

# Introduction, Setup, and Containers (Part 1)



A lab for CS 218

Authors: Dr. Melody Moh and Nathan Kong

Dept of Computer Science San Jose State University USA Fall 2017

### **Objectives:**

- Get access and learn about Nutanix
- Learn about the Prism GUI
- Become familiar with online references
- Verify cluster and storage pool creation through Prism GUI
- Create Containers

## **Readings:**

- Technical Background
  - Nutanix Bible: Book of Prism (Sections 2.1 to 2.4) and Acropolis -Nutanix Platform for Storage and Computer Virtualization, and Distributed Storage Fabric (Sections 3.1 to 3.2.8).
    - Nutanixbible.com
  - o Nutanix Platform Overview:
    - https://goo.gl/E8GRs6
- User Guide
  - o Advance Acropolis Administration Guide
    - https://goo.gl/PNVp1J
  - o Cluster Management:
    - https://goo.gl/UPBFYD
  - o Storage Management:
    - https://goo.gl/o0xQOh

For each question in this lab, <u>COPY</u> it to your lab report and place your answer under it. Each question must be <u>RED</u> and <u>NUMBERED</u>. Also for this lab turn it in as PDF FILE ONLY

#### 1. Support Signup

- 1.1. Go to: <a href="http://support.nutanix.com/">http://support.nutanix.com/</a>
- 1.2. Create a new account. You need to use an SJSU account. If you do not know how to access yours please message the TA.
- 1.3. (1) Login and take a screenshot. I should see the Title. E.g. "Welcome back, Bob"
- 1.4. Review the Nutanix services

#### 2. Login and Setup

- 2.1. Open your favorite browser and go to: <a href="https://206.169.130.250:9440/console/#login">https://206.169.130.250:9440/console/#login</a>
  - 2.1.1. You may be told that your connection is not private



## Your connection is not private

Attackers might be trying to steal your information from **206.169.130.250** (for example, passwords, messages, or credit cards). NET::ERR\_CERT\_AUTHORITY\_INVALID

Automatically report details of possible security incidents to Google. Privacy policy

ADVANCED

Back to safety

- 2.1.1.1. If so select "ADVANCED" then click Proceed (unsafe)
- 2.1.2. Login
  - 2.1.2.1. Username: your first and last name. e.g. Nate Kong -> natekong
  - 2.1.2.2. Password: your last name followed by the last 4 digits of your student ID; 5 if your last name has less than 4 characters. e.g. Student ID: 123456789 -> kong6789
- 2.2. Change password
  - 2.2.1. Select the user icon at the very right of the top menu bar
  - 2.2.2. Select "Change Password" from dropdown menu
  - 2.2.3. Change your password
- 2.3. Explore the GUI
  - 2.3.1. Select dropdown menu by clicking on "Home" in the menu bar
  - 2.3.2. Explore each element in the dropdown menu
    - 2.3.2.1. Some elements incorporate various views (e.g. Overview, Diagram, Table)

- 2.3.2.2. (2) Describe each Prism element
- 2.3.3. Go to the Hardware Element
  - 2.3.3.1. (3) Take a screenshot of the Diagram view and describe what the boxes are.
- 2.4. Answer the following questions:
  - 2.4.1. (4) What does a cluster consist of?
  - 2.4.2. (5) What does a Node consist of?
  - 2.4.3. (6) Draw or provide a drawing of the high level prism architecture

#### 3. Verify Cluster and Storage Pool

- 3.1. Review the user guide for cluster management
  - 3.1.1. (7) Take a screenshot of the cluster details from Prism
- 3.2. Review the user guide for storage management
  - 3.2.1. (8) Take a screenshot of the storage pool in table format from Prism
- 3.3. Answer the following questions:
  - 3.3.1.(9) What are the cluster components and what do they do (1-2 sentences)?
  - 3.3.2. (10) What is the minimum amount of nodes in a cluster?
  - 3.3.3.(11) What is a Storage Pool?
  - 3.3.4. (12) What is the maximum amount of storage pools as well as the pool size?

#### 4. Create a Container

- 4.1. Go to the Storage Element
- 4.2. Select "+ Storage Container" underneath the menu bar
- 4.3. Create a container with the following conditions:
  - 4.3.1. Name should be your first and last name without spaces
  - 4.3.2. Select "Save" to create container
- 4.4. (13) Go to Table view and take a screenshot. I should see your container.

## **Submission:**

To receive credit for the lab, create a PDF document containing the questions and the answers. Include screenshots when required. Questions and screenshots are in red.

Submit document through Slack via "Direct Messages"

The document title must be in the following format:

<Last Name>\_<First Name>\_Lab##.pdf

(Example: Kong\_Nathan\_Lab01.pdf)