Outline of Use Cases

# Teaching a Linux/Windows Class

* **Description**: A professor wishes to teach a class on how to use Linux/Windows operating system. The professor would like to create a number of VM’s for students to work with. This will allow easy and fast method to create any new VM for any student. The professor would like to have the ability to create and destroy these VM’s with relative ease.
* **Sequence of Steps**:
  1. Professor logs into Horizon
  2. Professor creates a number of VM’s for his/her class
  3. Professor assigns each VM to a student ID
     + The student will use their C.S. department login or another form of authentication
  4. The student logs into their designated V.M. and starts the class
  5. Once the class is over, the professor looks through each VM and grades or makes comments as he/she pleases
  6. Professor deletes the VM’s to restore resources for future uses

# Dr. Ludwig’s Project with Collecting Harvest Data

* **Description**: John Deere/RDO are collecting various data on beets harvesting. Dr. Ludwig wishes to store this data using a Hadoop cluster. She wishes to have the ability to easily create a Hadoop node quickly and easy. She would like for each Hadoop node to use/share the same data.
* **Sequence of Steps**
  1. Dr. Ludwig logs into Horizon
  2. Dr. Ludwigs creates a new compute node with a preconfigured image with Hadoop

# 

# Shane’s Video Rendering Project

* **Description**: Shane would like to create a network of nodes to render videos. Shane would like the size of the network to be determined based off each individual rendering need. Each of the nodes will be working together to render the same video. Once the video is done rendering, Shane like to destroy the nodes for future use.
* **Sequence of Steps**:
  1. Shane estimates the resources needed to render a particular video
  2. Shane logs into Horizon and creates the number of nodes he estimated
     + Each node has a preconfigured image with desired rendering video software
  3. Each node works together to render the same video
  4. Once the video is rendered, Shane will destroy the resources for future use

# Dr. Nyguard’s Project

* **Description**: TBD

# Electrical Engineer Project

* **Description**: TBD