Instances and Images

Instances

Also called a virtual machine, virtual operating system, or virtual server, an instance is an individual guest operating system that runs on top of a virtualization layer on top of a physical server. Please see Instances for a broad overview of the concept.

Launch an Instance

To launch an instance, use the command-line tool manage-instance. You will assign memory, disk, and CPU to the instance and choose a particular image from which to launch it. You can also use the `manage-instance` tool to perform other actions such as list, modify, bundle, and delete instances.

Requirements for an Instance

The requirements for an instance are fairly simple:

- The server to launch the instance on
- The path to the image (operating system) your instance will use
- The resources that you wish to dedicate to the instance

You also have options such as assigning a specific IP address to your instance or uploading a file upon launch. Before you can launch an instance make sure that you have reserved a server. If you are unfamiliar with server reservations please take a look at the manage-server com mand.

Allocating Resources to an Instance

Memory and disk resources cannot be oversubscribed to instances, and CPU units must be allocated in whole numbers. Instances can break out of the allocated CPU units if neighboring instances are under-utilizing their CPU allocation.

Step-By-Step Tutorial

For a step-by-step walk-through of launching an instance, please see the Linux Tutorial.

> Note: When you delete an instance (`manage-instance delete`) this totally destroys instances in the running, offline and failed states; it also erases all data. Please be careful when deleting instances.

Images Overview

A disk image is a file containing the complete contents and structure of an operating system; it is launched on a physical server to create your instance. You can use the base CentOS image provided by Xandr or use your own custom image. You can also bundle existing Xandr instances into images.

Using an Image

Passing a valid pointer to an image may have multiple steps. First you must specify a share name. This can either be "public" for the Xandr globally available base images, or a share name that belongs to you. Next, pass an image path which is the relative path to the image after the share name. For example, if you have mounted the "public" share on `/mnt/public` and wish to launch `/mnt/public/images/centos5-base/centos-current.fs.tgz` then you would pass the following arguments to the command: `--share-name=public --path=images/centos5-base/centos-current.fs.tgz`

Further Reading on Images:

Images and Kernels Overview
How to Create Custom Images
Start an Instance from a Custom Image
Bundle a Xandr Instance
Yum Repository Configuration Files (Updates to the base CentOS image are available in the yum repository.)
What Instance States Really Mean

Other things you may want to do with instances

Key Pair Authentication
Use the "upload" Parameter When Launching Instances
How to Resize an Instance
How to Set Up a New Management Instance
Monitoring Instances Using Ganglia
How to Apache Stress Test With ab Tool

Troubleshooting

Error message when launching instance
Error when launching an instance from a custom image
Long Launch Time