**Setting up Commandlevel API in a Ubuntu Linux machie.docx**

If running, Ubuntu Precise as a AWS instance :

install the following. If running Ubuntu 12.04 Precise in a local instance, move to step “d”

* 1. apt-get install openjdk-7-jdk
  2. Set JAVA\_HOME to the full path of the Java home directory.
     1. E.g. $ export JAVA\_HOME="/usr/lib/jvm/java-7-openjdk-amd64/jre/bin" (find the actual binary in your system and replace accordingly. You may use below to find it

root@ip-10-164-88-139:/home/ubuntu# file `which java`

/usr/bin/java: symbolic link to `/etc/alternatives/java'

root@ip-10-164-88-139:/home/ubuntu# file /etc/alternatives/java

/etc/alternatives/java: symbolic link to `/usr/lib/jvm/java-7-openjdk-amd64/jre/bin/java'

root@ip-10-164-88-139:/home/ubuntu# file /usr/lib/jvm/java-7-openjdk-amd64/jre/bin/java

/usr/lib/jvm/java-7-openjdk-amd64/jre/bin/java: ELF 64-bit LSB executable, x86-64, version 1 (SYSV), dynamically linked (uses shared libs), for GNU/Linux 2.6.24, BuildID[sha1]=0x49fe1f4d463ec8b3a3404bf5b21b88b6ad792188, stripped

root@ip-10-164-88-139:/home/ubuntu#

* 1. **Before you install ec2-api-tools**

## Install Packages

Enable the multiverse repository. This can be done through the Ubuntu Update Manager or by editing /etc/apt/sources.list Here are some commands that will enable multiverse on a new installation:

# 12.04 LTS Precise, 11.10 Oneiric

sudo perl -pi.orig -e 'next if /-backports/; s/^# (deb .\* multiverse)$/$1/' /etc/apt/sources.list

Enable the awstools PPA and update the apt package index:

sudo apt-add-repository ppa:awstools-dev/awstools

sudo apt-get update

* 1. **Install ec2-api-tools**

sudo apt-get install ec2-api-tools ec2-ami-tools

Optional:

apt-get install iamcli rdscli moncli ascli elasticache

# Also available on Ubuntu 12.04 LTS Precise

sudo apt-get install aws-cloudformation-cli elbcli

* 1. **Set up AWS Credentials**

nano ~/.bashrc

export AWS\_ACCESS\_KEY=xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

export AWS\_SECRET\_KEY=xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

export EC2\_URL=<https://ec2.us-east-1.amazonaws.com/>

export EC2\_REGION=us-east-1a

Make sure these are set in your current shell(s):

source $HOME/.bashrc

* 1. **Test**

Make sure that the command line tools are installed and have credentials set up correctly. These commands should not return errors:

ubuntu@ip-10-164-88-139:~$ ec2-describe-availability-zones

AVAILABILITYZONE us-east-1a available us-east-1

AVAILABILITYZONE us-east-1b available us-east-1

AVAILABILITYZONE us-east-1d available us-east-1

ubuntu@ip-10-164-88-139:~$

To Create an instance:

ec2-run-instances <ami-id> -k <keypair-name> -g <security-group> -z <availability-zone> -t <Instance type>

e.g. ec2-run-instances ami-35dbde5c -k cloudclass -g sgcloudclass -t t1.micro -z us-east-1a

# Command Reference:

**Account Attributes**

[ec2-describe-account-attributes](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeAccountAttributes.html)

**Amazon DevPay**

[ec2-confirm-product-instance](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ConfirmProductInstance.html)

**AMIs**

[ec2-copy-image](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CopyImage.html)

[ec2-create-image](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CreateImage.html)

[ec2-deregister](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DeregisterImage.html)

[ec2-describe-image-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeImageAttribute.html)

[ec2-describe-images](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeImages.html)

[ec2-migrate-image](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-MigrateImage.html)

[ec2-modify-image-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ModifyImageAttribute.html)

[ec2-register](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-RegisterImage.html)

[ec2-reset-image-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ResetImageAttribute.html)

**AMI Bundling (API Tools)**

[ec2-bundle-image](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/CLTRG-ami-bundle-image.html)

[ec2-bundle-vol](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/CLTRG-ami-bundle-vol.html)

[ec2-delete-bundle](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/CLTRG-ami-delete-bundle.html)

[ec2-download-bundle](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/CLTRG-ami-download-bundle.html)

[ec2-migrate-bundle](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/CLTRG-ami-migrate-bundle.html)

[ec2-migrate-manifest](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/CLTRG-ami-migrate-manifest.html)

[ec2-unbundle](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/CLTRG-ami-unbundle.html)

[ec2-upload-bundle](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/CLTRG-ami-upload-bundle.html)

**Bundle Tasks**

[ec2-bundle-instance](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-BundleInstance.html)

[ec2-cancel-bundle-task](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CancelBundleTask.html)

[ec2-describe-bundle-tasks](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeBundleTasks.html)

**Elastic Block Store**

[ec2-attach-volume](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-AttachVolume.html)

[ec2-copy-snapshot](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CopySnapshot.html)

[ec2-create-snapshot](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CreateSnapshot.html)

[ec2-create-volume](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CreateVolume.html)

[ec2-delete-disk-image](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DeleteDiskImage.html)

[ec2-delete-snapshot](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DeleteSnapshot.html)

[ec2-delete-volume](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DeleteVolume.html)

[ec2-describe-snapshot-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeSnapshotAttribute.html)

[ec2-describe-snapshots](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeSnapshots.html)

[ec2-describe-volume-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeVolumeAttribute.html)

[ec2-describe-volumes](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeVolumes.html)

[ec2-describe-volume-status](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeVolumeStatus.html)

[ec2-detach-volume](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DetachVolume.html)

[ec2-enable-volume-io](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-EnableVolumeIO.html)

[ec2-modify-snapshot-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ModifySnapshotAttribute.html)

[ec2-modify-volume-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ModifyVolumeAttribute.html)

[ec2-reset-snapshot-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ResetSnapshotAttribute.html)

**Elastic IP Addresses**

[ec2-allocate-address](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-AllocateAddress.html)

[ec2-associate-address](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-AssociateAddress.html)

[ec2-describe-addresses](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeAddresses.html)

[ec2-disassociate-address](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DisassociateAddress.html)

[ec2-release-address](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ReleaseAddress.html)

**Instances**

[ec2-describe-instance-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeInstanceAttribute.html)

[ec2-describe-instance-status](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeInstanceStatus.html)

[ec2-describe-instances](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeInstances.html)

[ec2-get-console-output](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-GetConsoleOutput.html)

[ec2-get-password](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-GetPassword.html)

[ec2-modify-instance-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ModifyInstanceAttribute.html)

[ec2-reboot-instances](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-RebootInstances.html)

[ec2-reset-instance-attribute](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ResetInstanceAttribute.html)

[ec2-run-instances](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-RunInstances.html)

[ec2-start-instances](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-StartInstances.html)

[ec2-stop-instances](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-StopInstances.html)

[ec2-terminate-instances](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-TerminateInstances.html)

**Key Pairs**

[ec2-create-keypair](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CreateKeyPair.html)

[ec2-delete-keypair](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DeleteKeyPair.html)

[ec2-describe-keypairs](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeKeyPairs.html)

[ec2-fingerprint-key](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-FingerprintKey.html)

[ec2-import-keypair](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ImportKeyPair.html)

**Monitoring**

[ec2-monitor-instances](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-MonitorInstances.html)

[ec2-unmonitor-instances](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-UnmonitorInstances.html)

**Regions and Availability Zones**

[ec2-describe-availability-zones](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeAvailabilityZones.html)

[ec2-describe-regions](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeRegions.html)

**Security Groups**

[ec2-authorize](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-AuthorizeSecurityGroupIngress.html)

[ec2-create-group](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CreateSecurityGroup.html)

[ec2-delete-group](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DeleteSecurityGroup.html)

[ec2-describe-group](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeSecurityGroups.html)

[ec2-revoke](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-RevokeSecurityGroupIngress.html)

**Tags**

[ec2-create-tags](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CreateTags.html)

[ec2-delete-tags](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DeleteTags.html)

[ec2-describe-tags](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeTags.html)

**VM Import**

[ec2-cancel-conversion-task](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CancelConversionTask.html)

[ec2-delete-disk-image](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DeleteDiskImage.html)

[ec2-describe-conversion-tasks](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeConversionTasks.html)

[ec2-import-instance](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ImportInstance.html)

[ec2-import-volume](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ImportVolume.html)

[ec2-resume-import](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-ResumeImport.html)

**VM Export**

[ec2-cancel-export-task](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CancelExportTask.html)

[ec2-create-instance-export-task](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-CreateInstanceExportTask.html)

[ec2-describe-export-tasks](http://docs.aws.amazon.com/AWSEC2/latest/CommandLineReference/ApiReference-cmd-DescribeExportTasks.html)