

Links

Amazon's info for instances:

<https://aws.amazon.com/ec2/instance-types/>

This 3rd-party website is sortable, filterable and includes prices:

<https://www.ec2instances.info>

Information on choosing a region:

<https://www.concurrencylabs.com/blog/choose-your-aws-region-wisely/>

Commands

Software Install Commands

Update linux

```
sudo yum -y update
```

Install software for compiling Radiance

```
sudo yum -y install tcsh gcc gcc-c++ libX11-devel
```

create a directory for Radiance:

```
mkdir Radiance
```

```
cd Radiance
```

download Radiance HEAD from radiance-online.org

```
wget --no-check-certificate http://www.radiance-online.org/software/snapshots/radiance-HEAD.tgz
```

```
wget --no-check-certificate http://www.radiance-online.org/download-install/radiance-source-code/latest-release/radR52supp.tar.gz
```

unpack tarballs

```
tar -xf radiance-HEAD.tgz
```

```
tar -xf radR52supp.tar.gz
```

compile and install radiance

```
cd ray
```

```
sudo ./makeall install
```

set raypath and copy cal files to raypath

```
echo RAYPATH=.:usr/local/lib/ray/ >> ~/.bash_profile
```

```
echo export RAYPATH >> ~/.bash_profile
```

```
sudo cp src/cal/cal/* /usr/local/lib/ray/.
```

check installation

```
rtrace -version
```

Mark Stock's Benchmark

Install git

```
sudo yum -y install git
```

clone benchmark repo

```
git clone https://github.com/markstock/Radiance-Benchmark4.git
```

run the benchmark

```
export NCPU=16; make smp
```

Mount EFS (Elastic File System)

Install tools

```
sudo yum install -y amazon-efs-utils
```

create mount point

```
mkdir efs
```

mount

```
sudo mount -t efs fs-8e7921f7:/ efs
```

Run David's example script

```
# After you've uploaded files to the
# change owner and group if it's your first time mounting the file system
sudo chown ec2-user efs
sudo chgrp ec2-user efs

# unpack zip files
unzip 01_genBSDF.zip
unzip example_noResults.zip

# change permission to make scripts executable
# this can be avoided if script has 'bash myscript.sh' instead of './myscript.sh'
cd example_noResults
chmod +x *.sh scripts/*.sh

# copy cal file to current directory so script can find it
cp ../01_genBSDF/window7_2side.cal .

# run command
nohup time bash 00_all.sh &
```

Bonus

```
#nproc on OSX:
echo alias nproc=\"sysctl -n hw.ncpu\" >> ~/.bash_profile
# Then launch a new shell
```