

Marnie Scully HW#3

HU Extension Assignment 03 E-90 Cloud Computing

Handed out: 09/18/20145

Due by 11:59PM on Friday, 09/25/2014

For all problems, use AWS CLI for all work with AWS.

1. Create a custom AMI from an **EBS-backed** Bitnami image. You can use this AMI: ami-2881c240, or any similar one. **Make sure that the AMI and the instance you are using have PARAVIRTUAL and not HVM virtualization type.**

Steps:

- a. Create an instance from a selected AMI

```
Marnie's MacBook Air:~ marnie$ aws ec2 run-instances --image-id ami-2881c240 --count 1 --instance-type t1.micro --key-name CLIKeyPair --security-groups RDGGroup
marnie - bash - 60x25
+-----+
| RunInstances
+-----+
| OwnerId | 413513583861
| ReservationId | r-ref21ab12
+-----+
| Instances
+-----+
| AmiLaunchIndex | 0
| Architecture | x86_64
| ClientToken |
| EbsOptimized |
| Hypervisor | xen
| ImageId | ami-2881c240
| InstanceId | i-0edcfcfdb
| InstanceType | t1.micro
| KernelId | aki-919dcraf8
| KeyName | CLIKeyPair
| LaunchTime | 2015-09-27T12:58:47.000Z
| PrivateDnsName | ip-172-31-3-77.ec2.internal
| PrivateIpAddress | 172.31.3.77
| PublicDnsName |
```

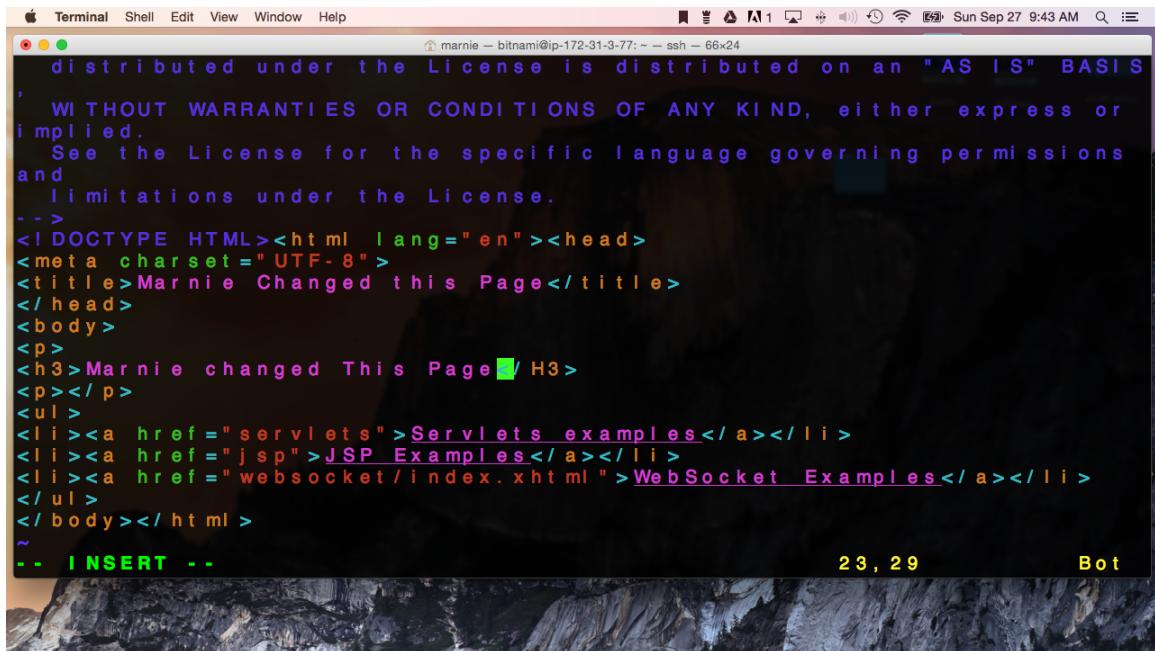
- b. Add a custom web page to the Tomcat server:

```
sudo mkdir /opt/bitnami/apache-tomcat/webapps/cscie90  
sudo cp /opt/bitnami/apache-tomcat/webapps/examples/  
index.html /opt/bitnami/apache-tomcat/webapps/cscie90  
sudo vi /opt/bitnami/apache-tomcat/webapps/cscie90/index.html
```

```
Terminal Shell Edit View Window Help 📁 ⌂ ⌄ ⌅ ⌆ ⌇ ⌈ ⌉ ⌊ ⌋ Sun Sep 27 9:46 AM ⌂ ⌃ ⌄ ⌅ ⌆ ⌇ ⌈ ⌉ ⌊ ⌋
bitnami@ip-172-31-3-77:~$ sudo mkdir /opt/bitnami/apache-tomcat/webapps/oscie90
bitnami@ip-172-31-3-77:~$ sudo cp /opt/bitnami/apache-tomcat/webapps/examples/index.html /opt/bitnami/apache-tomcat/webapps/oscie90
bitnami@ip-172-31-3-77:~$ sudo vi /opt/bitnami/apache-tomcat/webapps/oscie90/index.html
bitnami@ip-172-31-3-77:~$
```

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modify index.html however you want

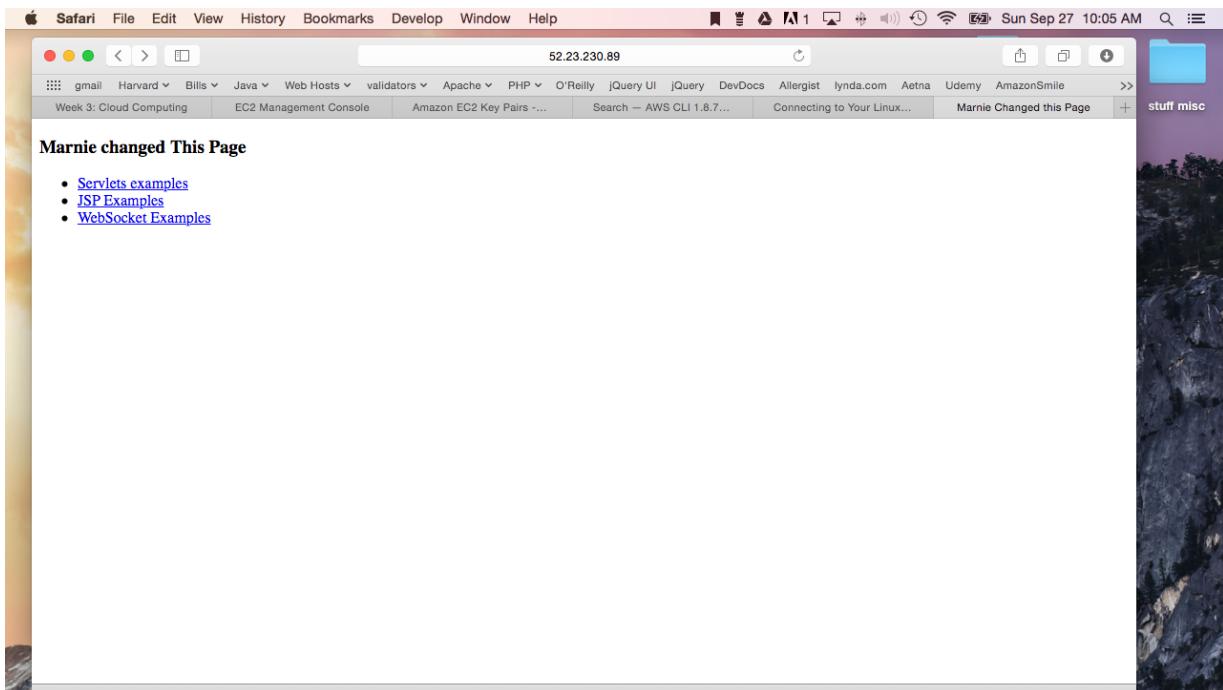


A screenshot of a Mac OS X terminal window titled "marnie - bitnami@ip-172-31-3-77: ~ - ssh - 66x24". The window displays the contents of an index.html file. The file includes a standard Apache license notice at the top, followed by an HTML document structure. The title is set to "Marnie Changed this Page". Inside the body, there is an H3 tag with the text "Marnie changed This Page". Below it is a list of three links: "Servlets examples", "JSP Examples", and "WebSocket Examples". The terminal window has a dark background with light-colored text. The status bar at the bottom right shows "23, 29 Bot". The desktop background visible behind the terminal window is a landscape image of a rocky cliff face.

```
d i s t r i b u t e d u n d e r t h e L i c e n s e i s d i s t r i b u t e d o n a n " A S I S " B A S I S
' W I T H O U T W A R R A N T I E S O R C O N D I T I O N S O F A N Y K I N D , e i t h e r e x p r e s s o r
i m p l i e d .
S e e t h e L i c e n s e f o r t h e s p e c i f i c l a n g u a g e g o v e r n i n g p e r m i s s i o n s
a n d
l i m i t a t i o n s u n d e r t h e L i c e n s e .
- - >
<! D O C T Y P E H T M L >< h t m l l a n g = " e n " >< h e a d >
< m e t a c h a r s e t = " U T F - 8 " >
< t i t l e > M a r n i e C h a n g e d t h i s P a g e </ t i t l e >
</ h e a d >
< b o d y >
< p >
< h 3 > M a r n i e c h a n g e d T h i s P a g e </ h 3 >
< p > </ p >
< u l >
< l i > < a h r e f = " s e r v l e t s " > S e r v l e t s _ e x a m p l e s < / a > < / l i >
< l i > < a h r e f = " j s p " > J S P _ E x a m p l e s < / a > < / l i >
< l i > < a h r e f = " w e b s o c k e t / i n d e x . x h t m l " > W e b S o c k e t _ E x a m p l e s < / a > < / l i >
</ u l >
</ b o d y > </ h t m l >
~ 
-- I N S E R T --
```

- c. Verify you can access the new page via browser: http://<your_public_ip1>/cscie90/

(It says "Marnie changed this page")



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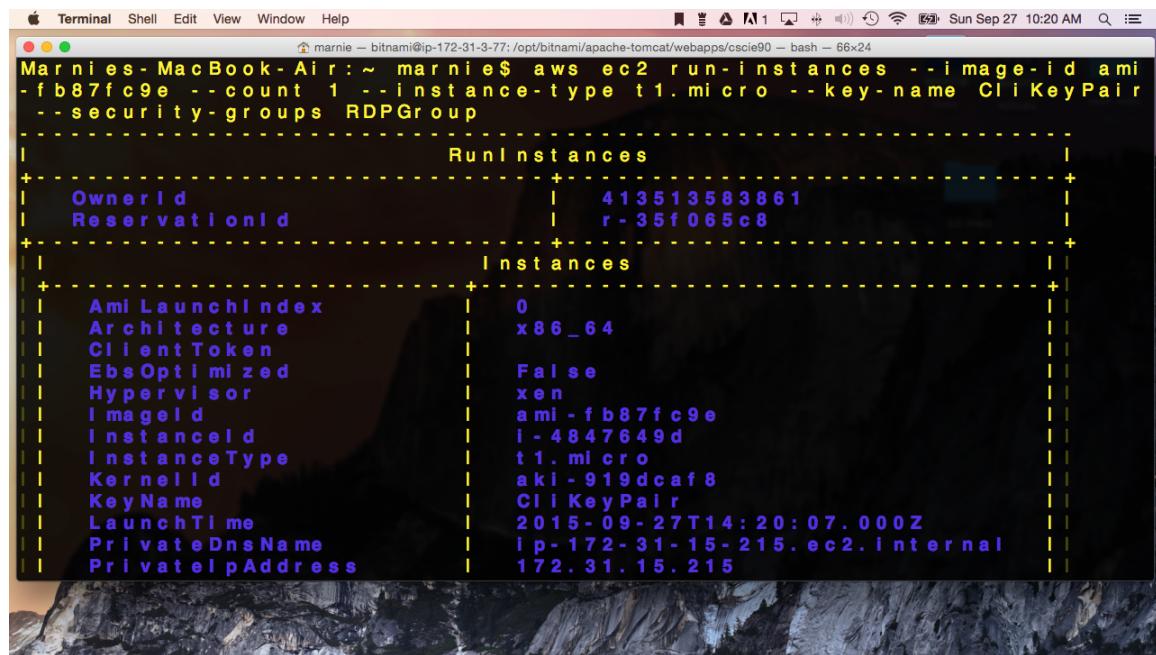
- d. Stop your instance and create a new AMI from this instance using AWS CLI command.

```
marnie@bitnami:~$ aws ec2 stop-instances --instance-id i-0edcfcfdb
marnie@bitnami:~$
```

```
marnie@bitnami:~$ aws ec2 create-image --instance-id i-0edcfcfdb --name "My CC AMI" --description "An AMI from an EBSLinux Instance"
marnie@bitnami:~$
```

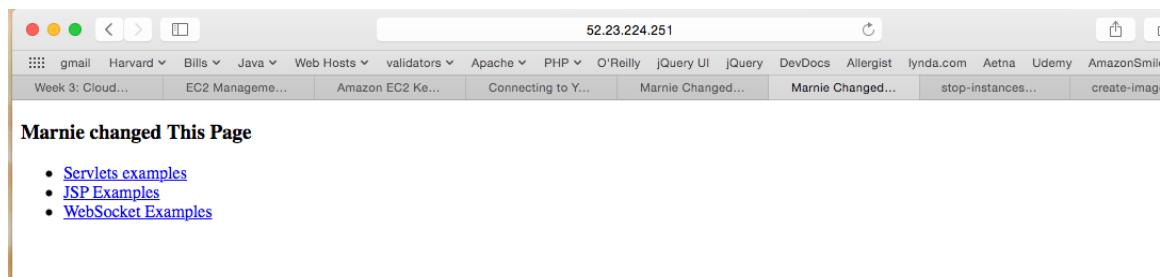
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- e. Create an instance from this new AMI



```
marnie@bitnami:~ marnie$ aws ec2 run-instances --image-id ami-fb87fc9e --count 1 --instance-type t1.micro --key-name CliKeyPair --security-groups RDPGroup
[...]
[+] RunInstances
+-----+
| OwnerId | 413513583861
| ReservationId | r-35f065c8
+-----+
[+] Instances
+-----+
| AmiLaunchIndex | 0
| Architecture | x86_64
| ClientToken | False
| EbsOptimized | xen
| Hypervisor | ami-fb87fc9e
| InstanceId | i-4847649d
| InstanceType | t1.micro
| KernelId | aki-919dcraf8
| KeyName | CliKeyPair
| LaunchTime | 2015-09-27T14:20:07.000Z
| PrivateDnsName | ip-172-31-15-215.ec2.internal
| PrivateIpAddress | 172.31.15.215
+-----+
```

- f. Verify you can see your new web page on the new instance: http://<your_public_ip2>/cscie90/



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2. Select a small Amazon owned instance-store Linux AMI, for example, ami-6b726502. It has AMI and EC2 tools already installed. If you are comfortable with another AMI, please free to work with that AMI. **Make sure that the AMI and the instance you are using have PARAVIRTUAL and not HVM virtualization type.**

```
Marnies-MacBook-Air:~ marnie$ aws ec2 run-instances --image-id ami-6b726502 --count 1 --instance-type m1.small --key-name CliKeyPair --security-groups RDPGroup
+-----+-----+
| RunInstances | +-----+
+-----+-----+
| OwnerId | | 413513583861
| ReservationId | | r-689c2cbe
+-----+-----+
| Instances | +-----+
+-----+-----+
| AmiLaunchIndex | | 0
| Architecture | | x86_64
| ClientToken | | False
| EbsOptimized | | xen
| Hypervisor | | ami-6b726502
| ImageId | | i-e00a3243
| InstanceId | | m1.small
| InstanceType | | aki-919dcfa8
| KernelId | | CliKeyPair
| LaunchTime | | 2015-09-27T14:33:48.000Z
| PrivateDnsName | | ip-172-31-60-254.ec2.internal
| PrivateIpAddress | | 172.31.60.254
+-----+-----+
```

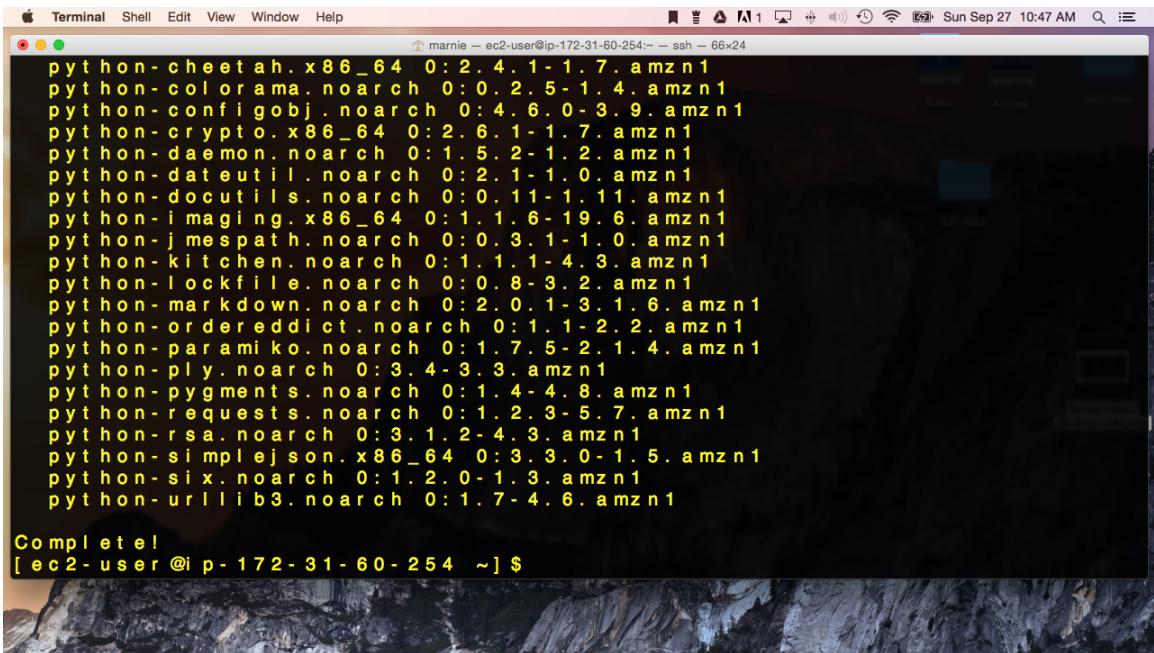
Before you start using your instance run “`sudo yum update`” command as the Linux user.

```
Terminal Shell Edit View Window Help marnie — ec2-user@ip-172-31-60-254:~ ssh — 66x24
Marnie's MacBook Air:~ marnie$ ssh -i "Cl i KeyPair.pem" ec2-user @54.164.46.148
The authenticity of host '54.164.46.148 (54.164.46.148)' can't be established.
RSA key fingerprint is 57:bb:b3:bc:3d:c7:36:01:3a:93:e6:24:2e:6a:f6:f8.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '54.164.46.148' (RSA) to the list of known hosts.

--|  --|- )
-| ( -- /     Amazon Linux AMI
---|\---|---|


https://aws.amazon.com/amazon-linux-ami/2014.03-release-notes/
39 package(s) needed for security, out of 204 available
Run "sudo yum update" to apply all updates.
Amazon Linux version 2015.09 is available.
[ec2-user@ip-172-31-60-254 ~]$ sudo yum update
```

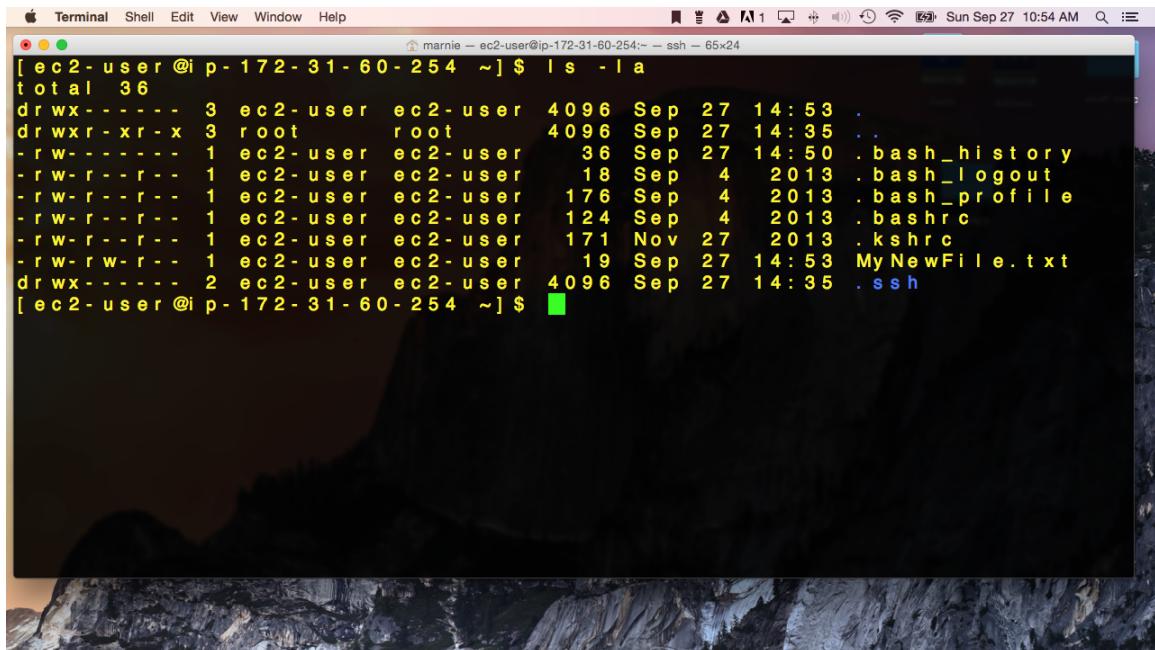
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```
marnie — ec2-user@ip-172-31-60-254:~ ssh 66x24
python-cheetah.x86_64 0:2.4.1-1.7.amzn1
python-colorama.noarch 0:0.2.5-1.4.amzn1
python-configobj.noarch 0:4.6.0-3.9.amzn1
python-crypto.x86_64 0:2.6.1-1.7.amzn1
python-daemon.noarch 0:1.5.2-1.2.amzn1
python-dateutil.noarch 0:2.1-1.0.amzn1
python-docutils.noarch 0:0.11-1.11.amzn1
python-imaging.x86_64 0:1.1.6-19.6.amzn1
python-jmespath.noarch 0:0.3.1-1.0.amzn1
python-kitchen.noarch 0:1.1.1-4.3.amzn1
python-lockfile.noarch 0:0.8-3.2.amzn1
python-markdown.noarch 0:2.0.1-3.1.6.amzn1
python-ordereddict.noarch 0:1.1-2.2.amzn1
python-paramiko.noarch 0:1.7.5-2.1.4.amzn1
python-ply.noarch 0:3.4-3.3.amzn1
python-pygments.noarch 0:1.4-4.8.amzn1
python-requests.noarch 0:1.2.3-5.7.amzn1
python-rsa.noarch 0:3.1.2-4.3.amzn1
python-simplejson.x86_64 0:3.3.0-1.5.amzn1
python-six.noarch 0:1.2.0-1.3.amzn1
python-urllib3.noarch 0:1.7-4.6.amzn1

Complete!
[ec2-user@ip-172-31-60-254 ~]$
```

Modify something on your instance, so that you can later prove to yourself that your modification got carried over to the new AMI you will be creating and its instances. For example, add a simple file somewhere but not in /mnt or other directories that are excluded from the bundling process – for example, add a file “myNewFile.txt” to ec2-user’s home directory.



```
[ec2-user@ip-172-31-60-254 ~]$ ls -la
total 36
drwx----- 3 ec2-user ec2-user 4096 Sep 27 14:53 .
drwxr-xr-x 3 root root 4096 Sep 27 14:35 ..
-rw----- 1 ec2-user ec2-user 36 Sep 27 14:50 .bash_history
-rw-r--r-- 1 ec2-user ec2-user 18 Sep 4 2013 .bash_logout
-rw-r--r-- 1 ec2-user ec2-user 176 Sep 4 2013 .bash_profile
-rw-r--r-- 1 ec2-user ec2-user 124 Sep 4 2013 .bashrc
-rw-rw-r-- 1 ec2-user ec2-user 171 Nov 27 2013 .kshrc
-rw-rw-r-- 1 ec2-user ec2-user 19 Sep 27 14:53 MyNewFile.txt
drwx----- 2 ec2-user ec2-user 4096 Sep 27 14:35 .ssh
[ec2-user@ip-172-31-60-254 ~]$
```

Copied my credentials to the image

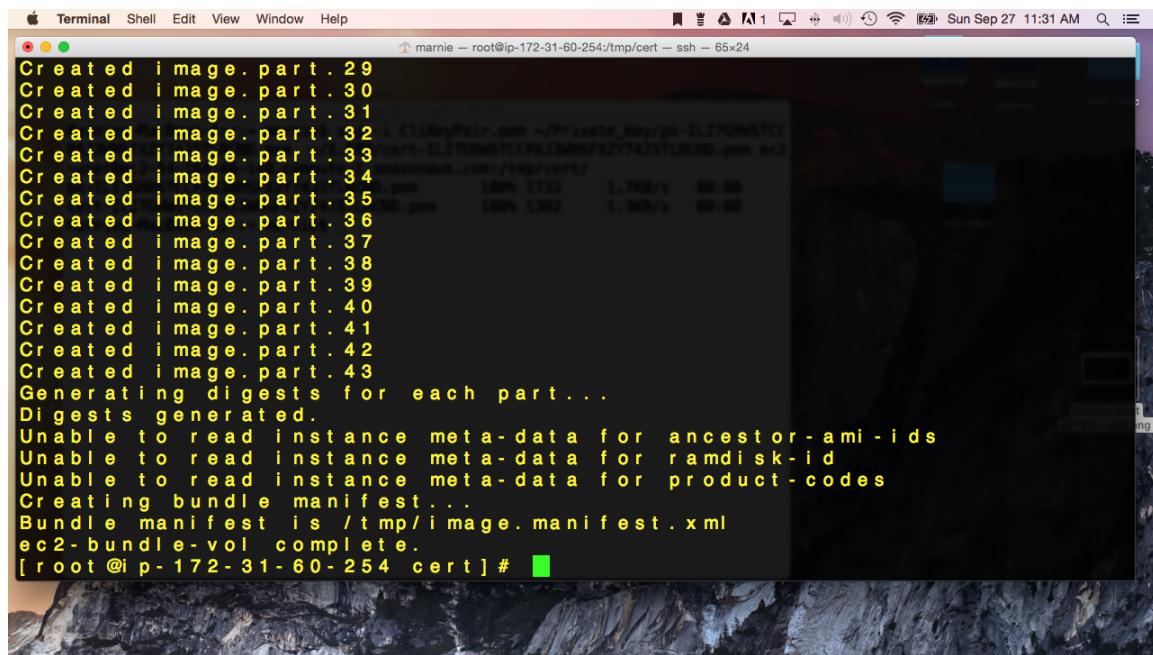
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```
[ec2-user@ip-172-31-60-254 ~]$ ls
My NewFile.txt
[ec2-user@marnie-MacBook-Air:~] marnie$ scp -i CliKeyPair.pem ~/Private_Key/pk-ILI7GHWSTCCPAJ3WHHSFXZY74J5TLRCND.pem ~/X.509/cert-ILI7GHWSTCCPAJ3WHHSFXZY74J5TLRCND.pem ec2-user@ec2-54-164-46-148.compute-1.amazonaws.com:/tmp/cert/
pk-ILI7GHWSTCCPAJ3WHHSFXZY74J5TLRCND.pem      100% 1732      1.7KB/s  00:00
cert-ILI7GHWSTCCPAJ3WHHSFXZY74J5TLRCND.pem    100% 1302      1.3KB/s  00:00
Marnies-MacBook-Air:~ marnie$
```

Bundle your instance up.

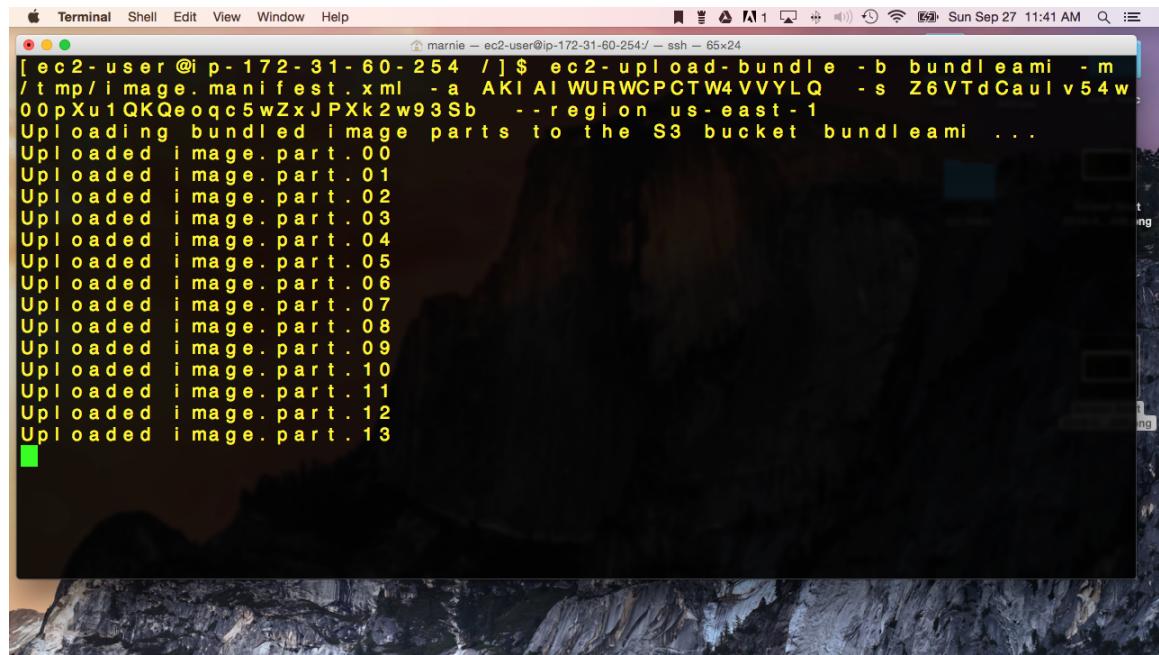
```
marnie ~ root@ip-172-31-60-254:/tmp/cert ~ ssh ~ 65x24
[ root @i p - 172 - 31 - 60 - 254 cert ] # $EC2_AMI_TOOL_HOME/bin/ec2-bundle-v
l -k /tmp/cert/pk-1L17GHWSTCCPAJ3WHSFXZY74J5TLRCND.pem -c /tmp/c
rt/cert-1L17GHWSTCCPAJ3WHSFXZY74J5TLRCND.pem -u 413513583861 -r
x86_64 -e /tmp/cert
Setting partition type to bundle "/" with...
Auto-detecting partition type for "/"
Partition label detected using parted: "loop"
Using partition type "none"
Copying / into the image file /tmp/image...
Excluding:
  /proc
  /sys
  /dev
  /dev/pts
  /proc/sys/fs/binfmt_misc
  /dev
  /media
  /mnt
  /proc
  /sys
  /tmp/cert
  /tmp/image
  /mnt/img-mnt
```

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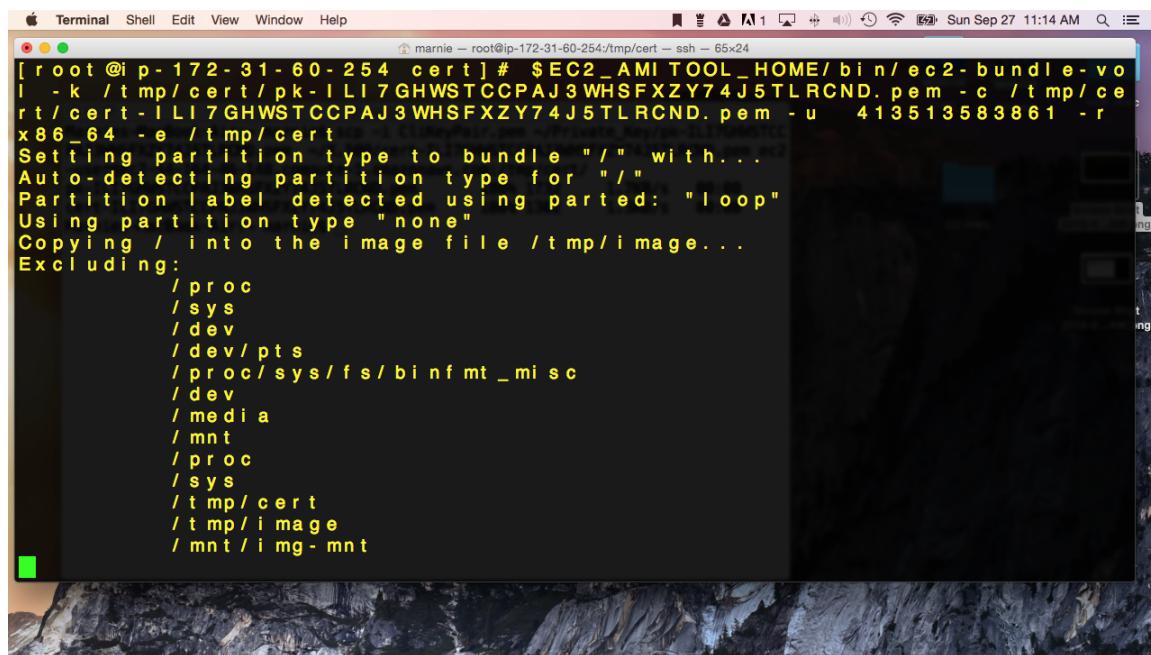
```
Terminal Shell Edit View Window Help marnie — root@ip-172-31-60-254:/tmp/cert — ssh — 65x24
Created image.part.29
Created image.part.30
Created image.part.31
Created image.part.32
Created image.part.33
Created image.part.34
Created image.part.35
Created image.part.36
Created image.part.37
Created image.part.38
Created image.part.39
Created image.part.40
Created image.part.41
Created image.part.42
Created image.part.43
Generating digests for each part...
Digests generated.
Unable to read instance meta-data for ancestor-ami-ids
Unable to read instance meta-data for ramdisk-id
Unable to read instance meta-data for product-codes
Creating bundle manifest...
Bundle manifest is /tmp/image.manifest.xml
ec2-bundle-eval complete.
[root @ ip-172-31-60-254 cert] #
```

Create your own S3 backed replica image

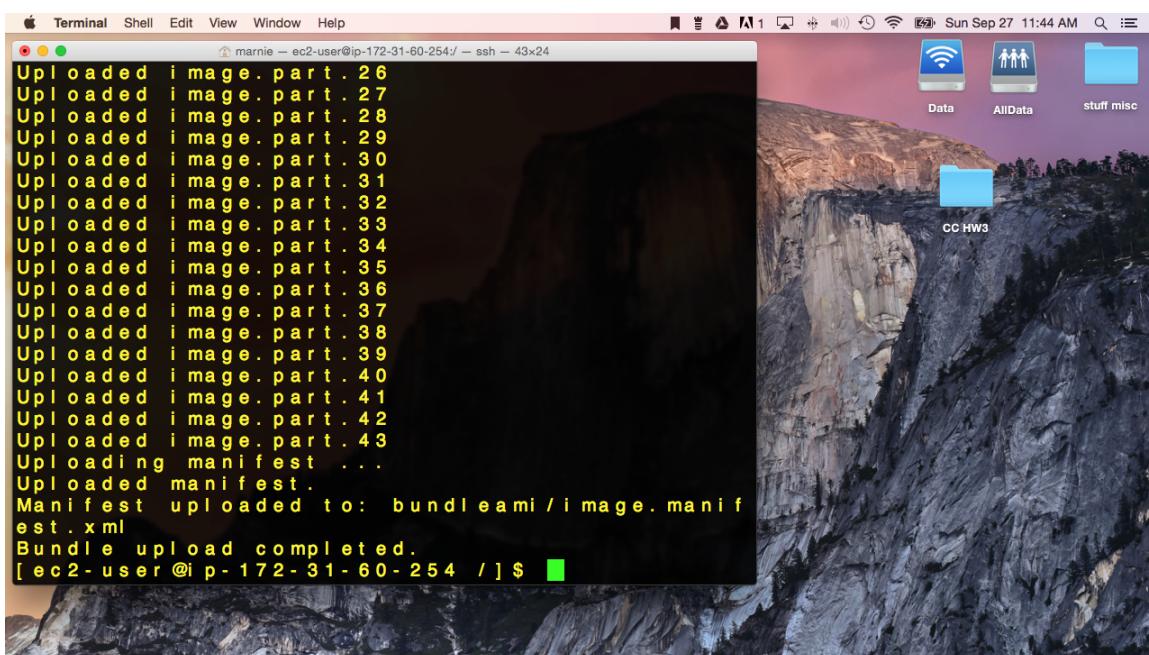


```
Terminal Shell Edit View Window Help marnie — ec2-user@ip-172-31-60-254:/ — ssh — 65x24
[ec2-user @ ip-172-31-60-254 /]$ ec2-upload-bundle -b bundleami -m /tmp/image.manifest.xml -a AKIAIWURWCPECTW4VVYLQ -s Z6VTdCaulv54w00pxU1QKQeoqc5wZxJPXk2w93Sb --region us-east-1
Uploading bundled image parts to the S3 bucket bundleami ...
Uploaded image.part.00
Uploaded image.part.01
Uploaded image.part.02
Uploaded image.part.03
Uploaded image.part.04
Uploaded image.part.05
Uploaded image.part.06
Uploaded image.part.07
Uploaded image.part.08
Uploaded image.part.09
Uploaded image.part.10
Uploaded image.part.11
Uploaded image.part.12
Uploaded image.part.13
```

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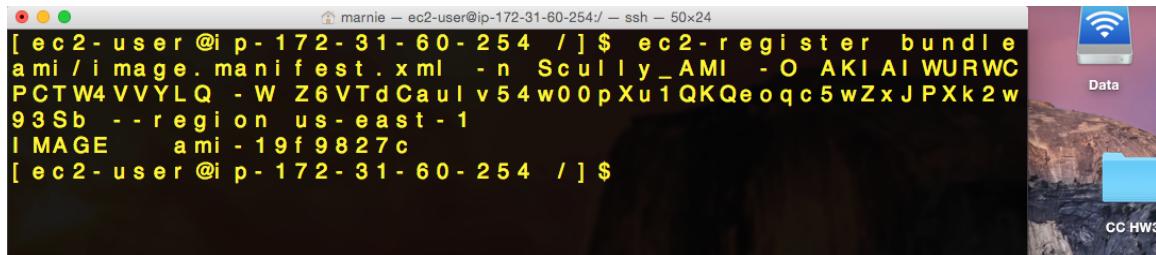
```
[root@ip-172-31-60-254 cert]# $EC2_AMI_HOME/bin/ec2-bundle-vol -k /tmp/cert/pk-1LI7GHWSTCCPAJ3WHSFXZY74J5TLRCND.pem -c /tmp/cert/cert-1LI7GHWSTCCPAJ3WHSFXZY74J5TLRCND.pem -u 413513583861 -r x86_64 -e /tmp/cert
Setting partition type to bundle "/" with...
Auto-detecting partition type for "/"
Partition label detected using parted: "loop"
Using partition type "none"
Copying / into the image file /tmp/image...
Excluding:
/proc
/sys
/dev
/dev/pts
/proc/sys/fs/binfmt_misc
/dev
/media
/mnt
/proc
/sys
/tmp/cert
/tmp/image
/mnt/img-mnt
```



```
marnie - ec2-user@ip-172-31-60-254:~ ssh - 43x24
[ec2-user@ip-172-31-60-254 ~]$ ls
Data AllData misc
[ec2-user@ip-172-31-60-254 ~]$ cd misc
[ec2-user@ip-172-31-60-254 misc]$ ls
CC HW3
[ec2-user@ip-172-31-60-254 misc]$ cd CC HW3
[ec2-user@ip-172-31-60-254 CC HW3]$ ls
image.part.26
image.part.27
image.part.28
image.part.29
image.part.30
image.part.31
image.part.32
image.part.33
image.part.34
image.part.35
image.part.36
image.part.37
image.part.38
image.part.39
image.part.40
image.part.41
image.part.42
image.part.43
[ec2-user@ip-172-31-60-254 CC HW3]$ ./upload.sh
Uploading manifest...
Uploaded manifest.
Manifest uploaded to: bundleami/image.manifest.xml
Bundle upload completed.
[ec2-user@ip-172-31-60-254 ~]$
```

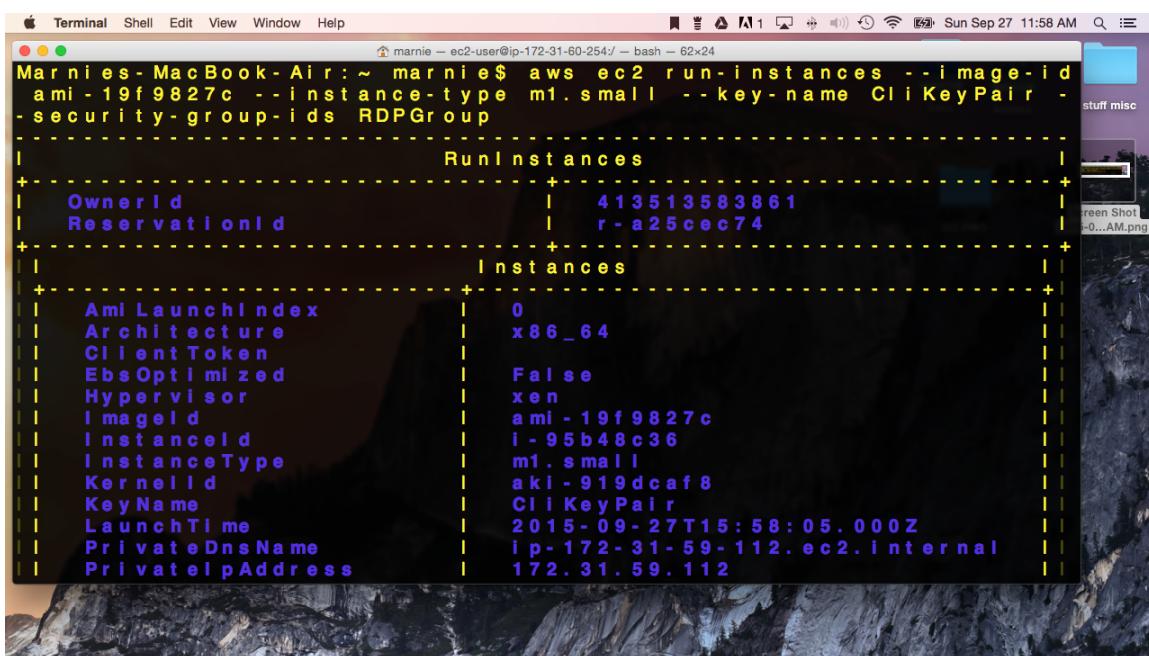
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Register your new AMI.



```
marnie — ec2-user@ip-172-31-60-254:/ — ssh — 50x24
[ec2-user@ip-172-31-60-254 /]$ ec2-register bundle
ami/image.manifest.xml -n Scully_AMI -O AKIAIWURWC
PCTW4VVYLQ -W Z6VTdCaulv54w00pXu1QKQeoqc5wZxJPXk2w
93Sb --region us-east-1
IMAGE ami-19f9827c
[ec2-user@ip-172-31-60-254 /]$
```

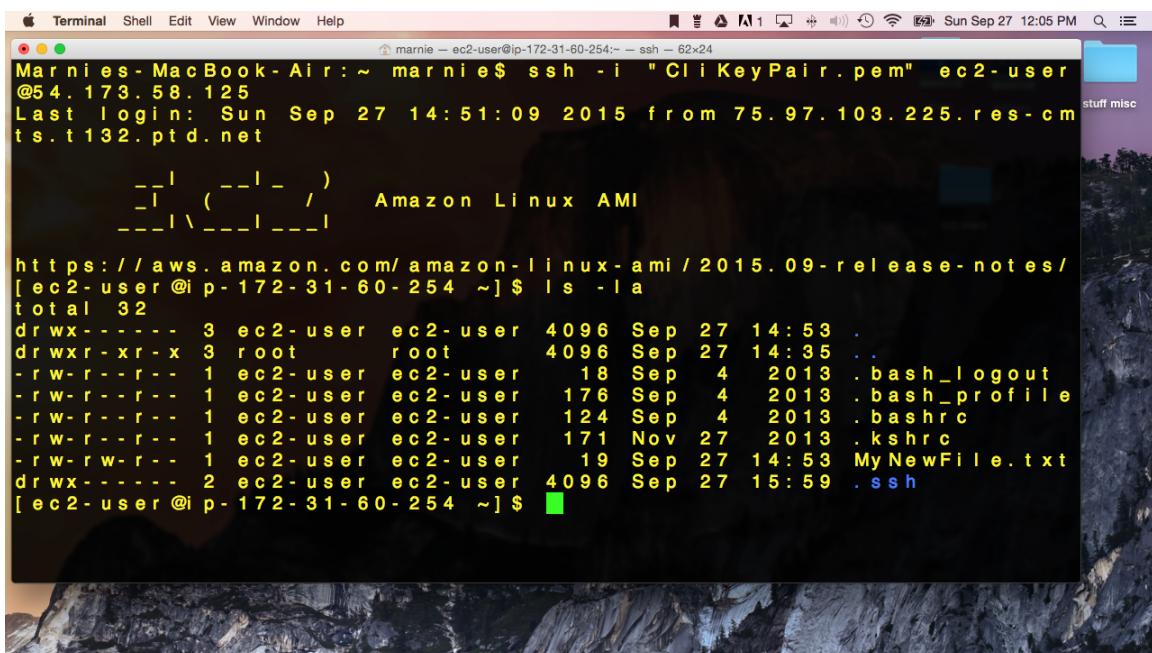
Verify that you can run an instance based on that AMI.



```
Marnie's-MacBook-Air:~ marnie$ aws ec2 run-instances --image-id
ami-19f9827c --instance-type m1.small --key-name CliKeyPair --
--security-group-ids RDPGroup
+
+-----+-----+
| RunInstances | +-----+
+-----+-----+
| OwnerId | | 413513583861 |
| ReservationId | | r-a25cec74 |
+-----+-----+
+-----+-----+
| Instances | +-----+
+-----+-----+
| AmiLaunchIndex | | 0 |
| Architecture | | x86_64 |
| ClientToken | | False |
| EbsOptimized | | xen |
| Hypervisor | | ami-19f9827c |
| ImageId | | i-95b48c36 |
| InstanceId | | m1.small |
| InstanceType | | aki-919dcdf8 |
| KernelId | | CliKeyPair |
| KeyName | | LaunchTime |
| PrivateDnsName | | 2015-09-27T15:58:05.000Z |
| PrivateIpAddress | | ip-172-31-59-112.ec2.internal |
| PrivateIpAddress | | 172.31.59.112 |
```

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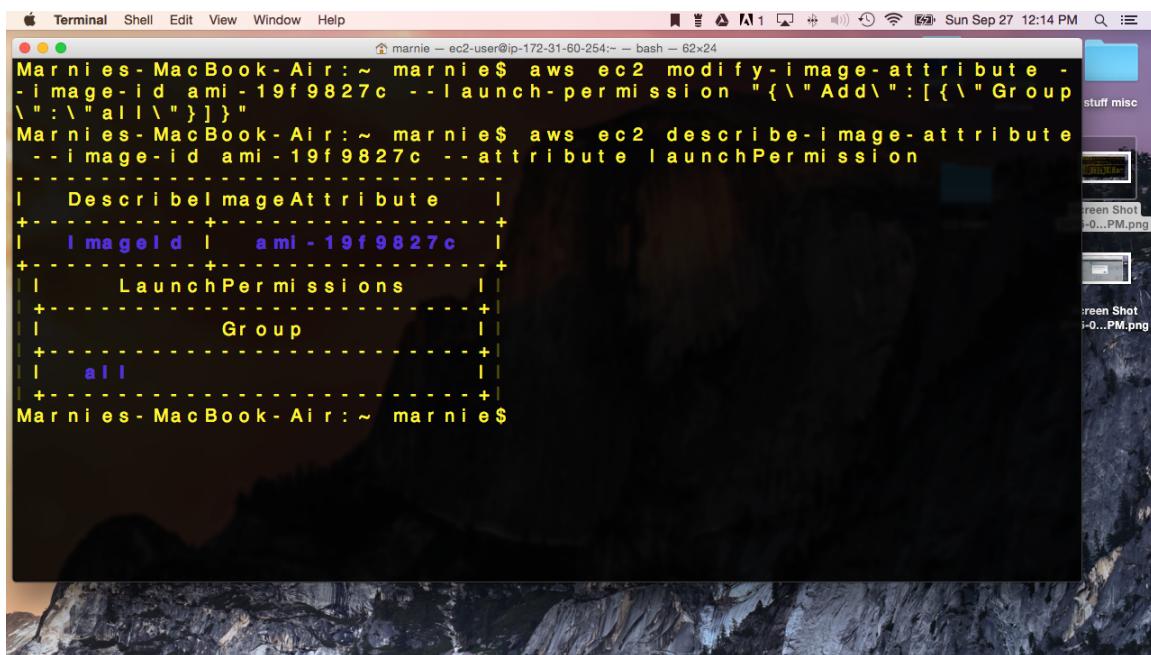
Check that your modifications survived the process. The file MyNewFile.txt is present in the new instance.



```
marnie - ec2-user@ip-172-31-60-254:~ ssh -i "CloudKeyPair.pem" ec2-user
@54.173.58.125
Last login: Sun Sep 27 14:51:09 2015 from 75.97.103.225.r.es-cm
ts.t132.ptd.net

      _\   _/ )     Amazon Linux AMI
     _\ \_/_\_
https://aws.amazon.com/amazon-linux-ami/2015.09-release-notes/
[ec2-user@ip-172-31-60-254 ~]$ ls -la
total 32
drwxr-xr-x 3 ec2-user ec2-user 4096 Sep 27 14:53 .
drwxr-xr-x 3 root    root    4096 Sep 27 14:35 ..
-rw-r--r-- 1 ec2-user ec2-user 18 Sep 4 2013 .bash_logout
-rw-r--r-- 1 ec2-user ec2-user 176 Sep 4 2013 .bash_profile
-rw-r--r-- 1 ec2-user ec2-user 124 Sep 4 2013 .bashrc
-rw-r--r-- 1 ec2-user ec2-user 171 Nov 27 2013 .kshrc
-rw-rw-r-- 1 ec2-user ec2-user 19 Sep 27 14:53 MyNewFile.txt
drwxr-xr-x 2 ec2-user ec2-user 4096 Sep 27 15:59 ssh
[ec2-user@ip-172-31-60-254 ~]$
```

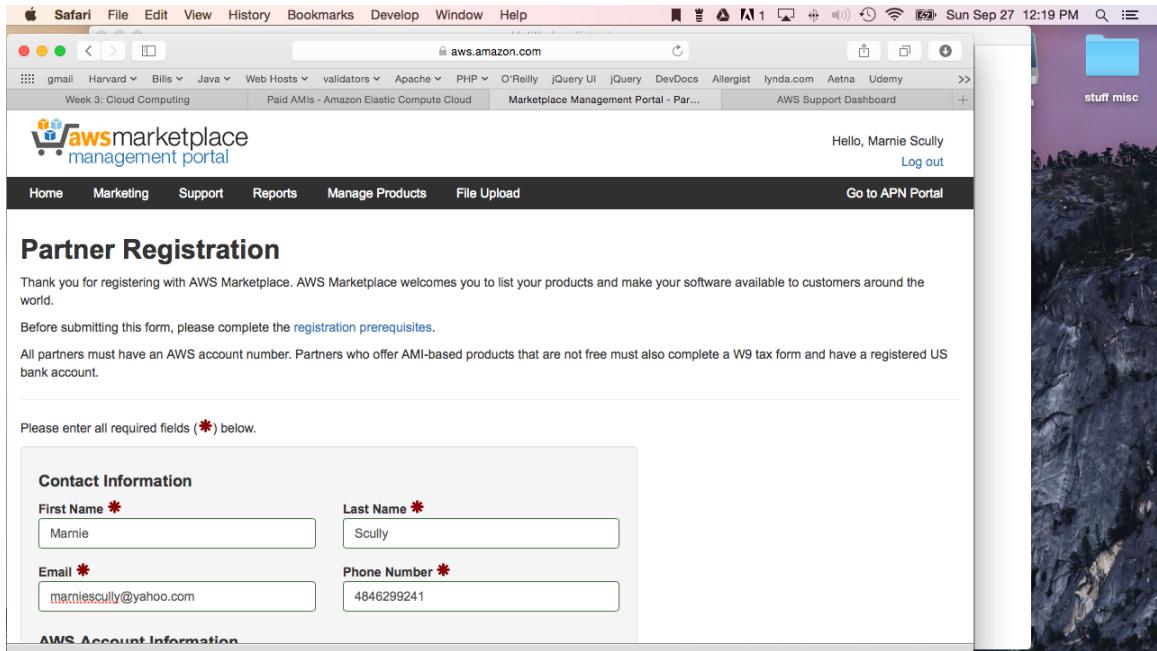
Grant access to your AMI to the general public.



```
Marnie - MacBook-Air:~ marnie$ aws ec2 modify-image-attribute \
--image-id ami-19f9827c --launch-permission "[{\"Add\": [{\"Group\": \"all\"}]}]"
Marnie - MacBook-Air:~ marnie$ aws ec2 describe-image-attribute \
--image-id ami-19f9827c --attribute launchPermission
{
  "ImageId": "ami-19f9827c",
  "LaunchPermissions": [
    {
      "Group": "all"
    }
  ]
}
Marnie - MacBook-Air:~ marnie$
```

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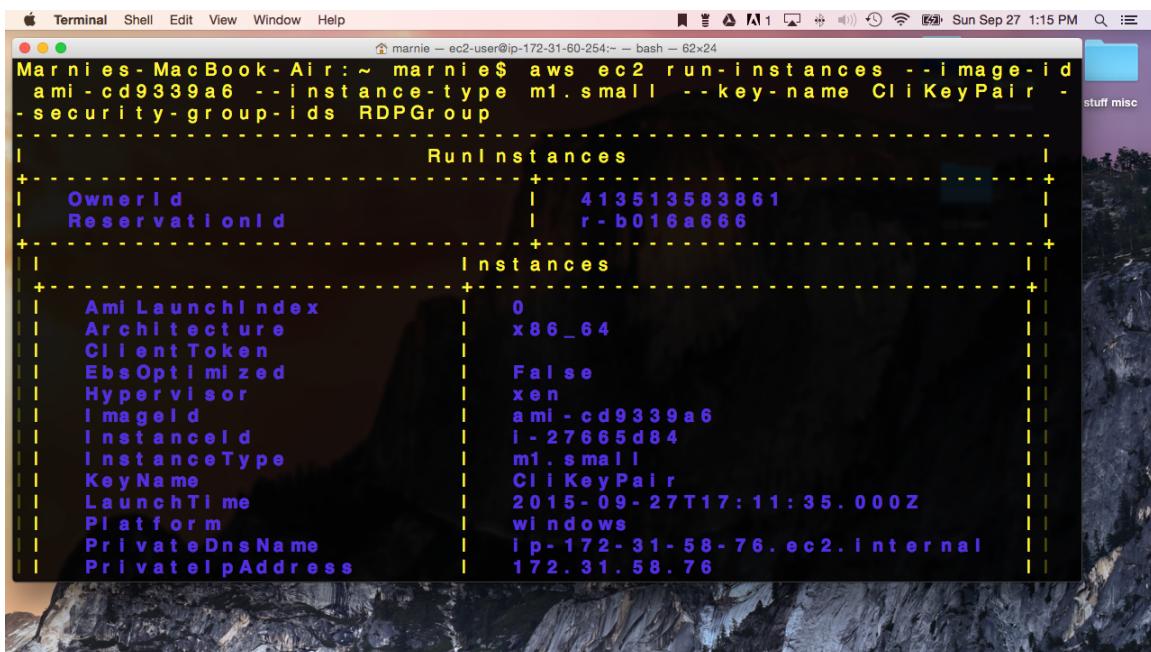
Start the process of trying to register your AMI as a paid AMI. I stopped at this



The screenshot shows a Safari browser window on a Mac. The address bar says "aws.amazon.com". The main content is the "awsmarketplace management portal". The title is "Partner Registration". It says "Thank you for registering with AWS Marketplace. AWS Marketplace welcomes you to list your products and make your software available to customers around the world." Below that, it says "Before submitting this form, please complete the [registration prerequisites](#). All partners must have an AWS account number. Partners who offer AMI-based products that are not free must also complete a W9 tax form and have a registered US bank account." A note at the bottom says "Please enter all required fields (*) below." The "Contact Information" section contains fields for First Name (Marnie), Last Name (Scully), Email (marniescully@yahoo.com), and Phone Number (4846299241). There is also a "AWS Account Information" section which is currently collapsed.

form that asked for CC information as stated in the forums to do.

3. Create your own EBS Windows backed AMI from: ami-cd9339a6. and retrieve



```
marnie$ aws ec2 run-instances --image-id ami-cd9339a6 --instance-type m1.small --key-name CliKeyPair --security-group-ids RDPGroup
-----
| RunInstances
+-----+
| OwnerId           | 413513583861
| ReservationId    | r-b016a666
+-----+
| Instances
+-----+
| AmiLaunchIndex    | 0
| Architecture      | x86_64
| ClientToken       | False
| EbsOptimized      | xen
| Hypervisor        | ami-cd9339a6
| ImageId           | i-27665d84
| InstanceId        | m1.small
| InstanceType       | CliKeyPair
| LaunchTime         | 2015-09-27T17:11:35.000Z
| Platform           | windows
| PrivateDnsName    | ip-172-31-58-76.ec2.internal
| PrivateIpAddress   | 172.31.58.76
```

instance ID

Marnie Scully HW#3

Request and receive the administrator password



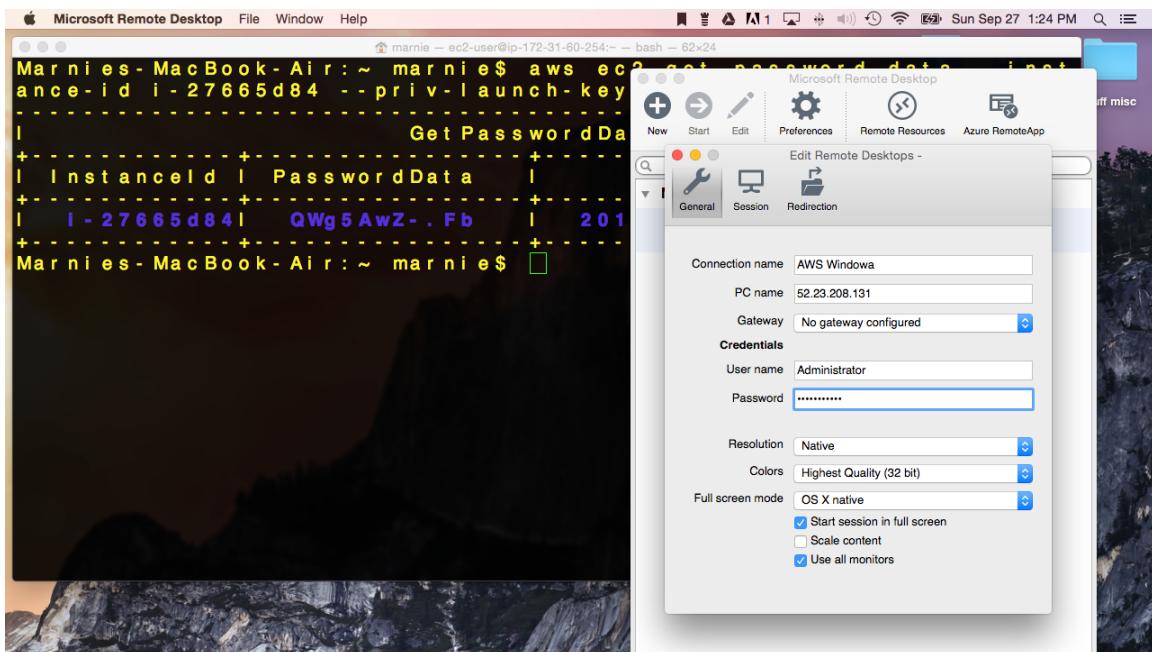
```
marnie$ aws ec2 run-instances --image-id ami-cd9339a6 --instance-type m1.small --key-name CliKeyPair --security-group-ids RDPGroup
marnie$ aws ec2 get-password-data --instance-id i-27665d84 --priv-launch-key
marnie$
```

The screenshot shows a macOS Terminal window with the title bar "Terminal" and the status bar "Sun Sep 27 1:15 PM". The command `aws ec2 run-instances` is run, followed by `aws ec2 get-password-data`. The terminal output displays the instance details and the generated password.

RunInstances	
OwnerId	413513583861
ReservationId	r-b016a666
Instances	
AmiLaunchIndex	0
Architecture	x86_64
ClientToken	False
EbsOptimized	xen
Hypervisor	ami-cd9339a6
ImageId	i-27665d84
InstanceId	m1.small
InstanceType	CliKeyPair
KeyName	2015-09-27T17:11:35.000Z
LaunchTime	windows
Platform	ip-172-31-58-76.ec2.internal
PrivateDnsName	172.31.58.76
PrivateIpAddress	

Get PasswordData	
InstanceId	PasswordData
i-27665d84	QWg5AwZ-.Fb

Connect to the Instance with RDP

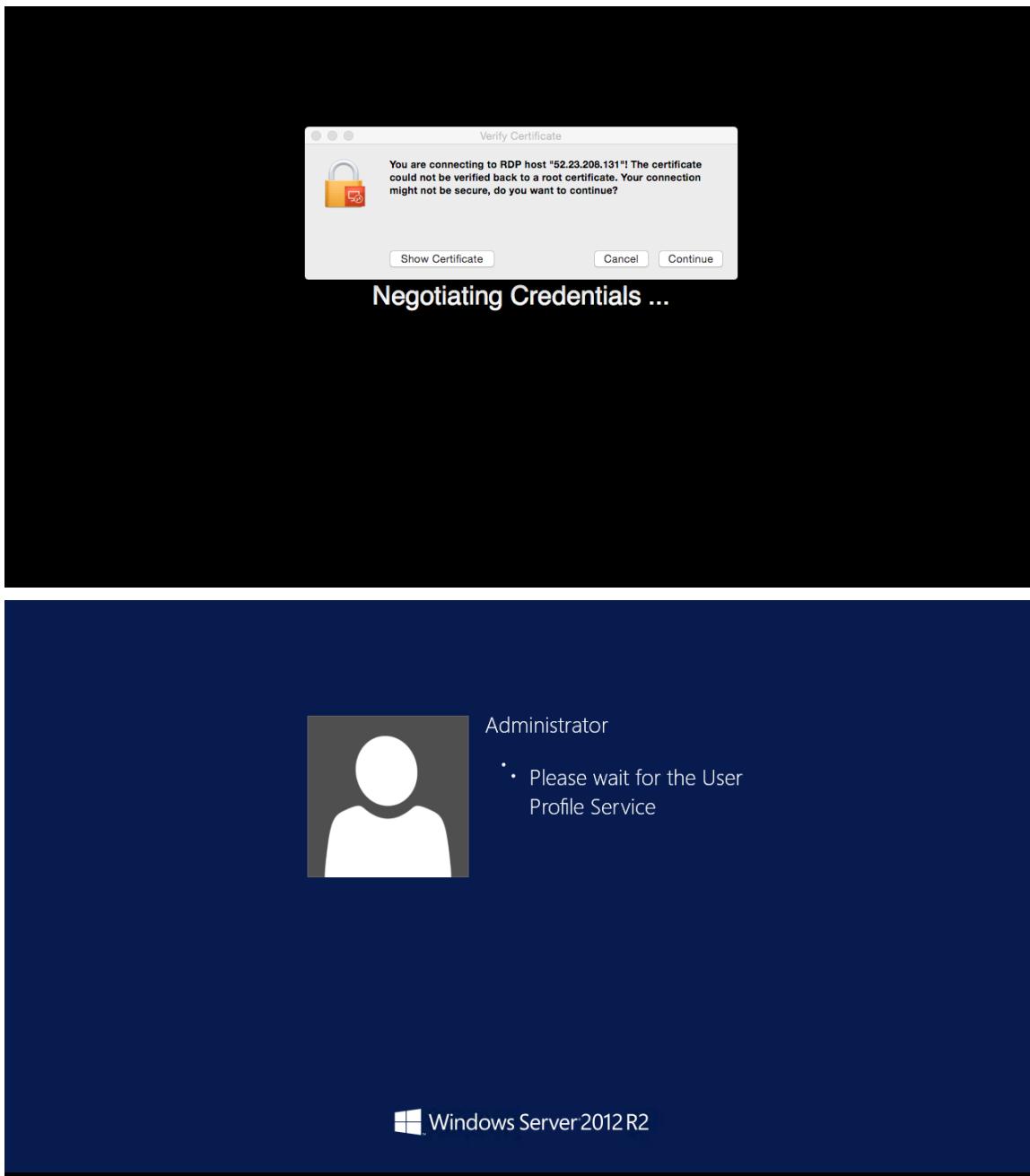


```
marnie$ aws ec2 get-password-data --instance-id i-27665d84 --priv-launch-key
marnie$
```

The screenshot shows a Microsoft Remote Desktop application window over a macOS Terminal window. The terminal shows the command `aws ec2 get-password-data` being run again. The Remote Desktop window shows the connection settings for "AWS Windows".

New	Start	Edit	Preferences	Remote Resources	Azure RemoteApp
Edit Remote Desktops -					
General					
Connection name	AWS Windows				
PC name	52.23.208.131				
Gateway	No gateway configured				
Credentials					
User name	Administrator				
Password	*****				
Resolution	Native				
Colors	Highest Quality (32 bit)				
Full screen mode	OS X native				
<input checked="" type="checkbox"/> Start session in full screen					
<input type="checkbox"/> Scale content					
<input checked="" type="checkbox"/> Use all monitors					

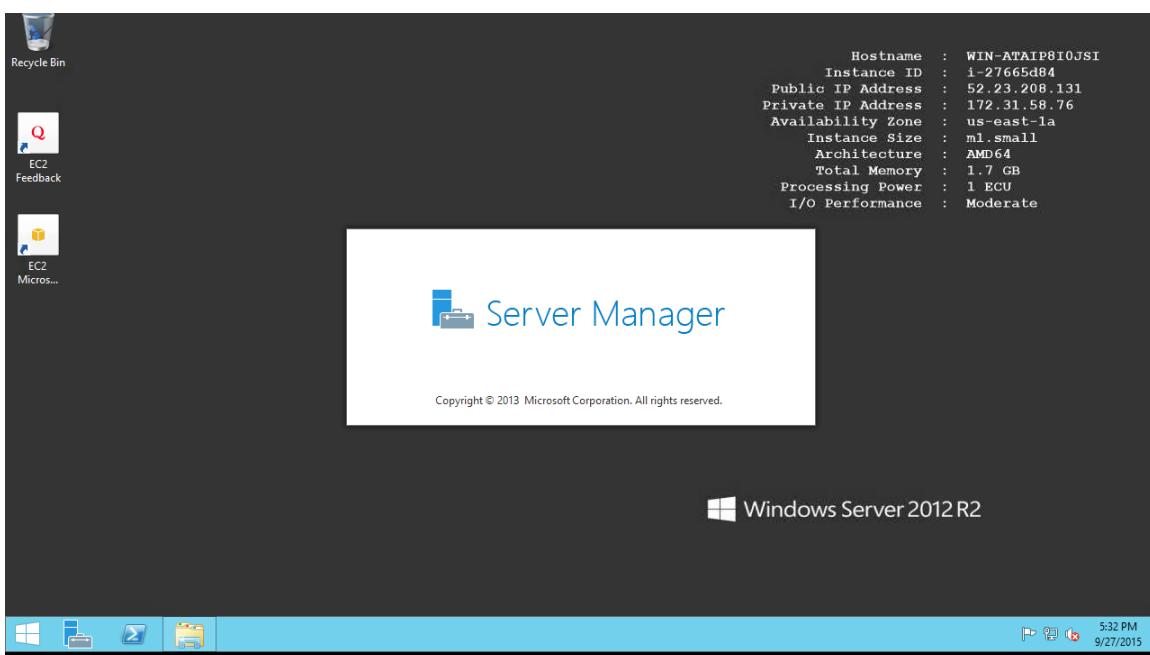
Marnie Scully HW#3



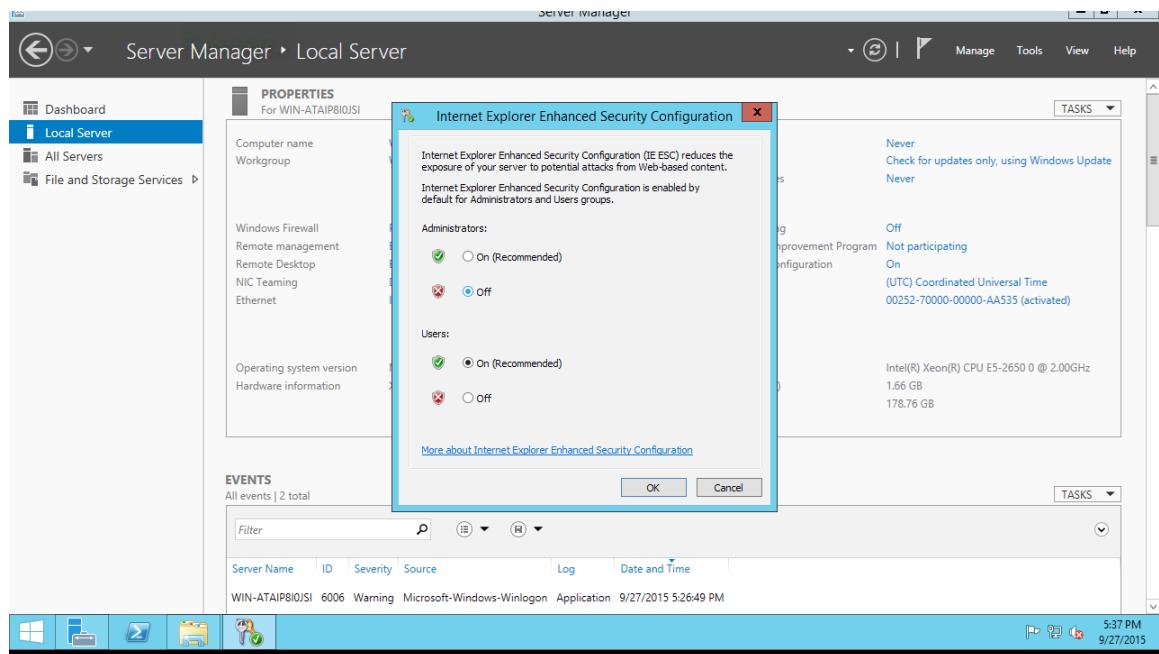
Marnie Scully HW#3



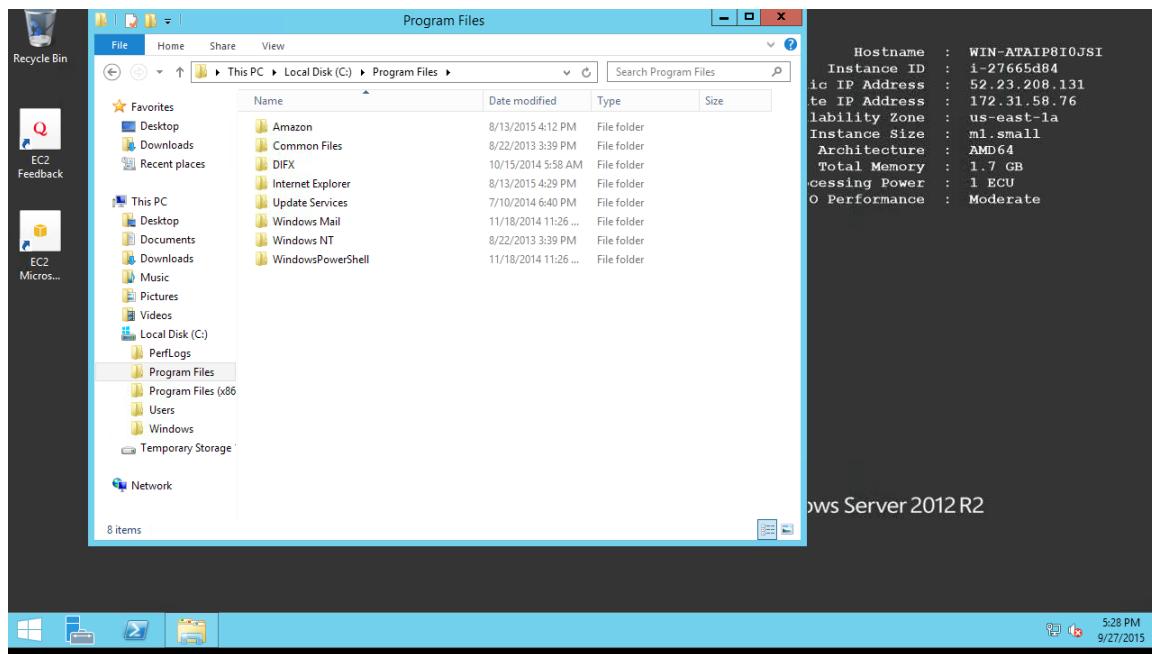
Change security of server to allow web access



Marnie Scully HW#3

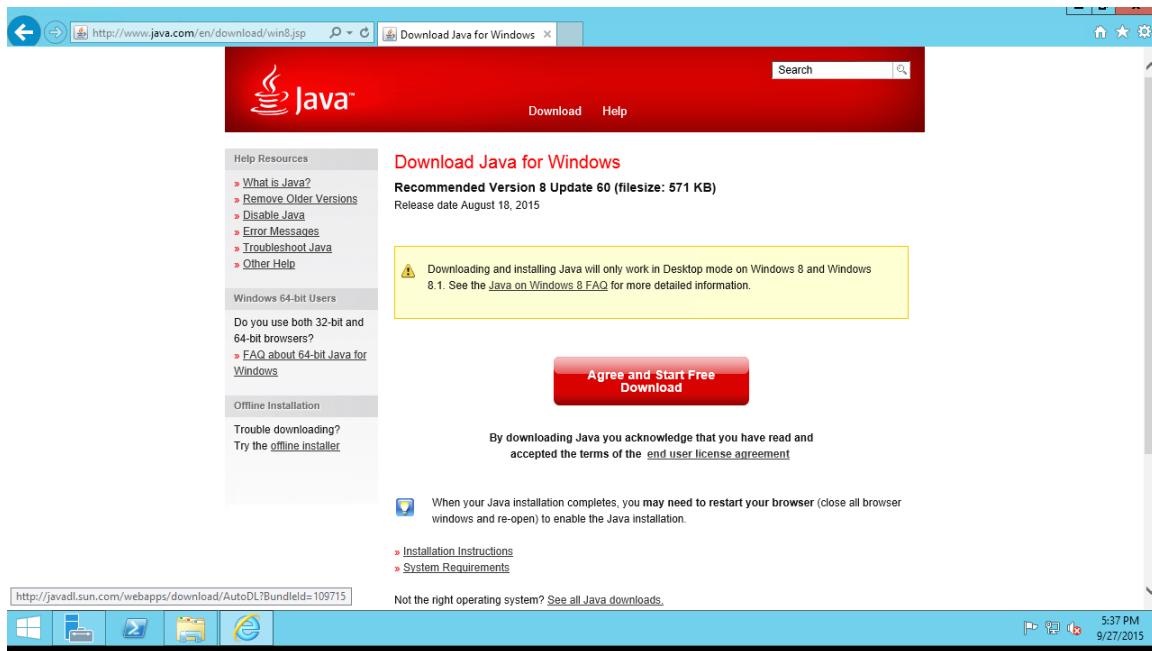


Verify Java isn't installed yet.

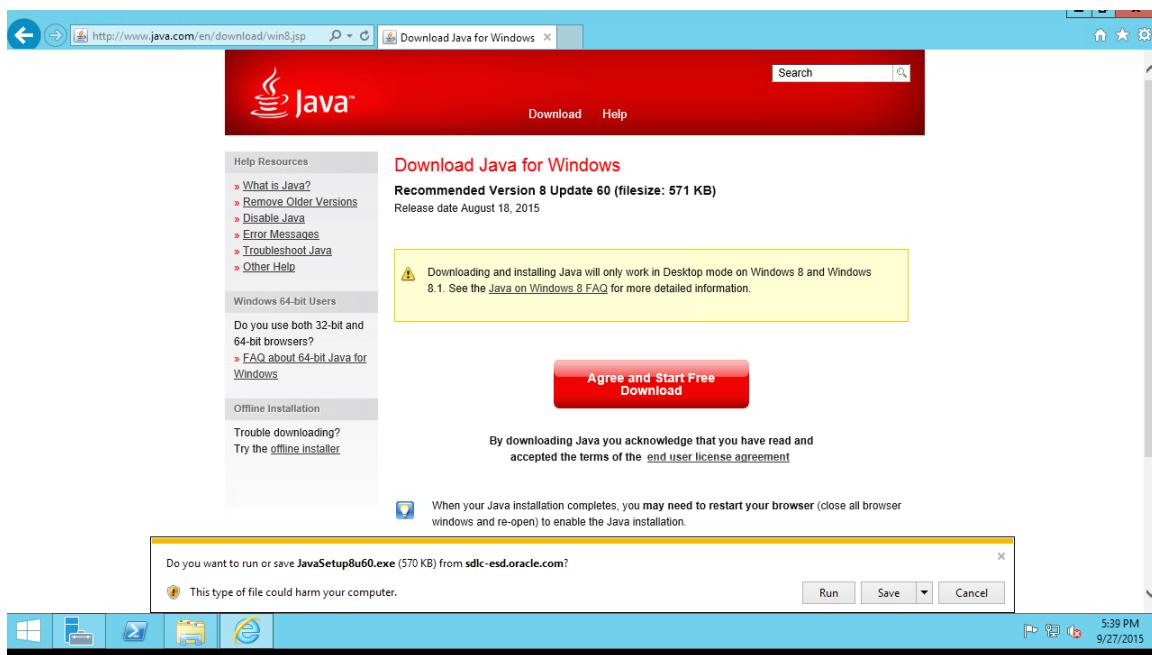


Marnie Scully HW#3

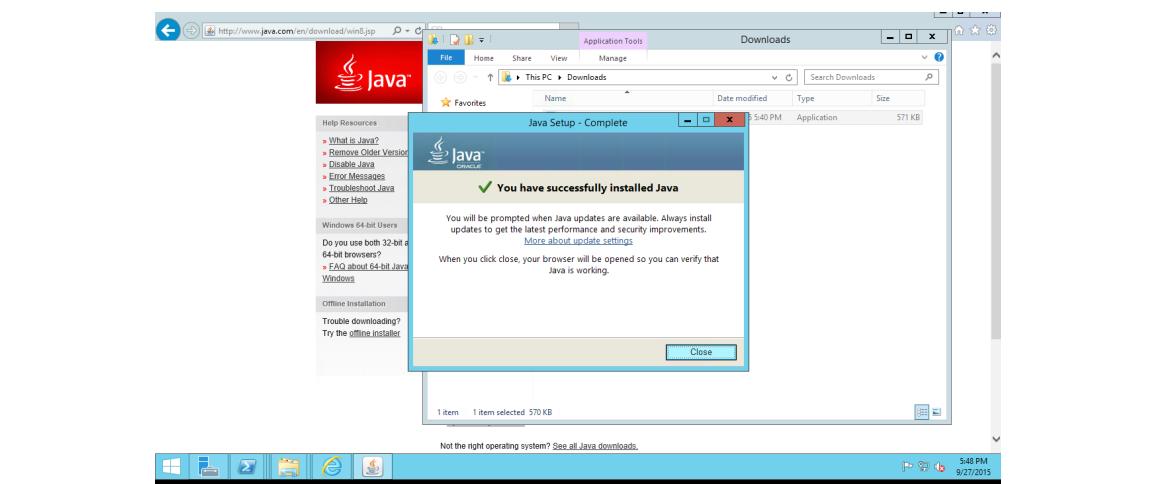
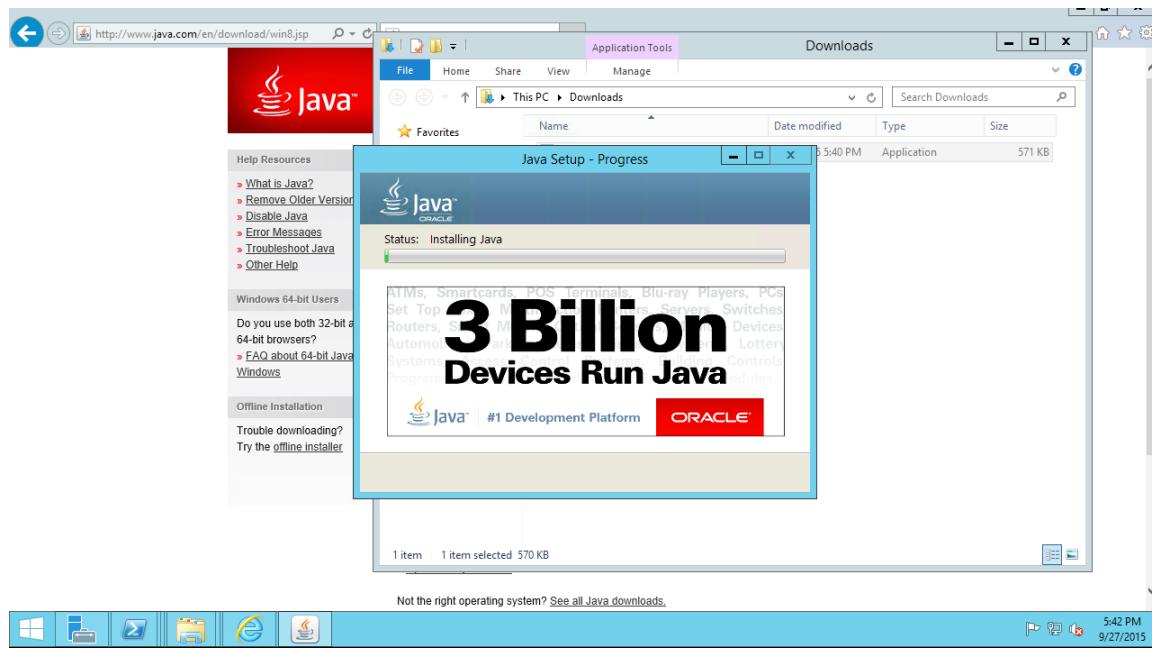
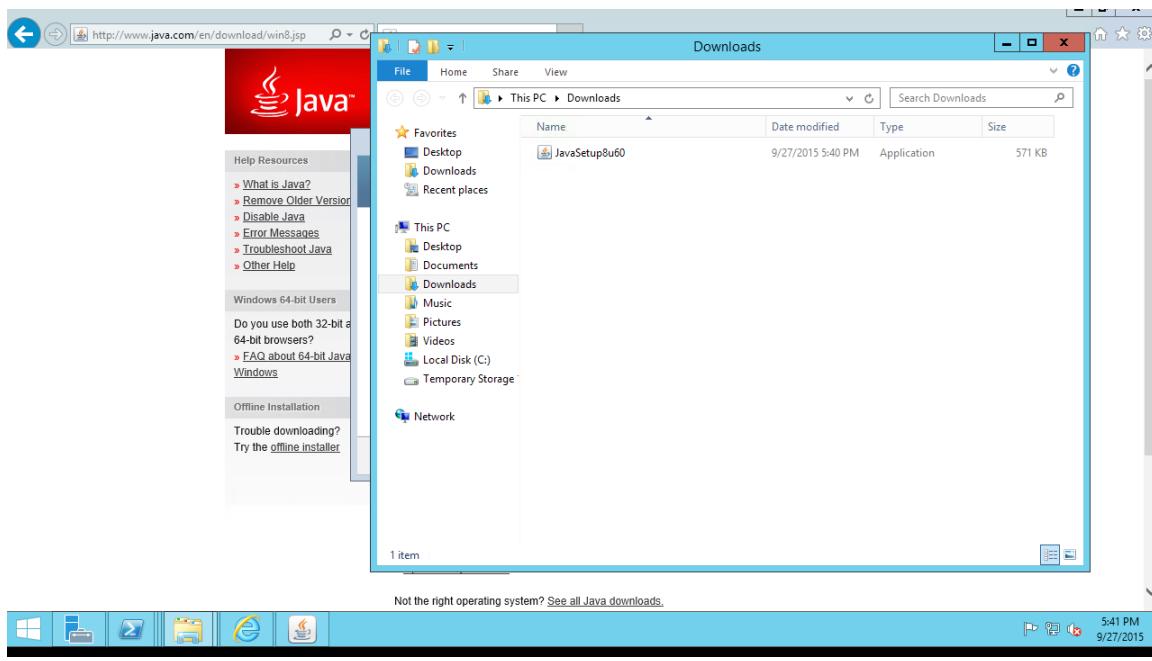
Install Java



Click Download and choose Save. Navigate to the folder and execute file.



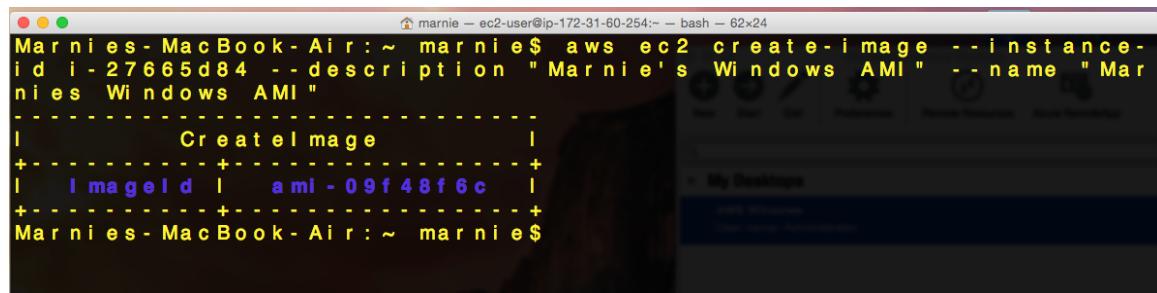
Marnie Scully HW#3



Marnie Scully HW#3

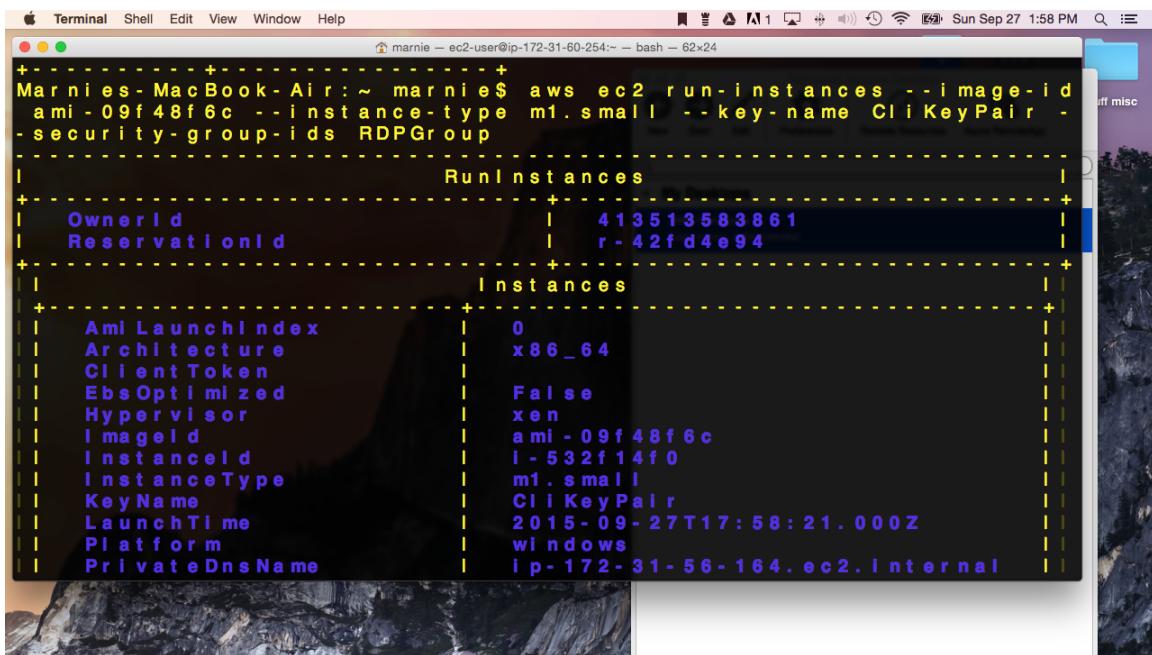


Run an instance created from that AMI. Do it using `aws ec2 create-image` command which you run from your client machine, Windows or MAC.



```
marnie - ec2-user@ip-172-31-60-254:~ marnie$ aws ec2 create-image --instance-id i-27665d84 --description "Marnie's Windows AMI" --name "Marnie's Windows AMI"
-----
| Create image |
+-----+
| ImageId | ami-09f48f6c |
+-----+
Marnie - MacBook - Air : ~ marnie$
```

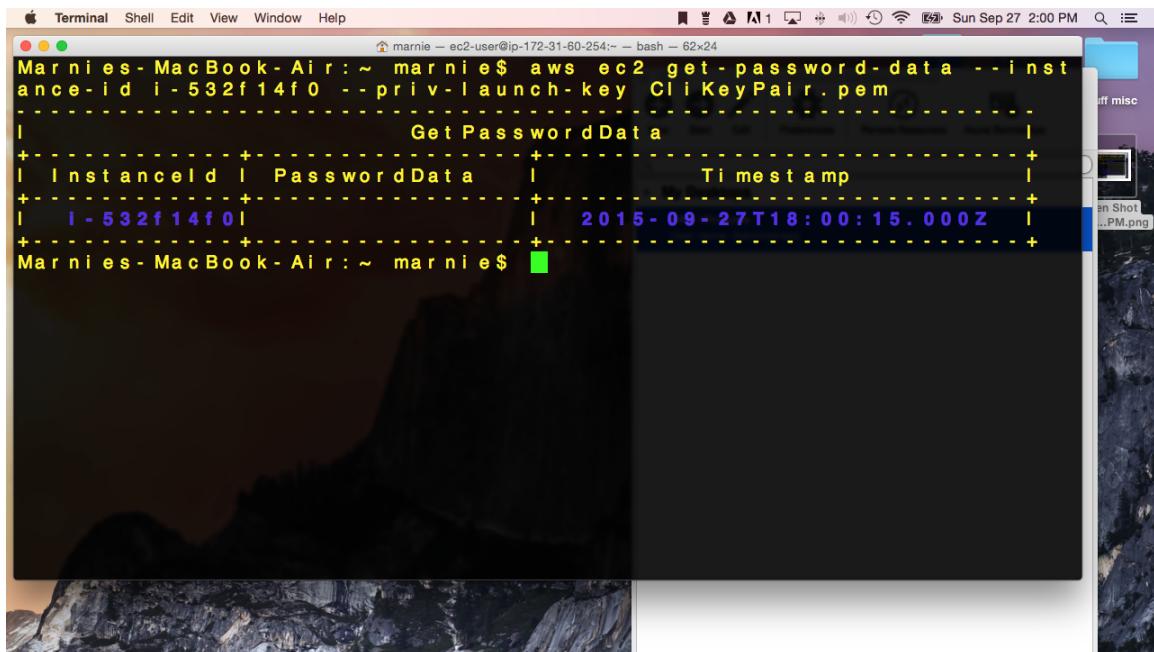
Create new instance created from my AMI



```
marnie - ec2-user@ip-172-31-60-254:~ marnie$ aws ec2 run-instances --image-id ami-09f48f6c --instance-type m1.small --key-name CliKeyPair --security-group-ids RDPGroup
-----
| RunInstances |
+-----+
| OwnerId | 413513583861
| ReservationId | r-42fd4e94
+-----+
| Instances |
+-----+
| AmiLaunchIndex | 0
| Architecture | x86_64
| ClientToken |
| EbsOptimized |
| Hypervisor |
| ImageId | ami-09f48f6c
| InstanceId | i-532f14f0
| InstanceType | m1.small
| KeyName | CliKeyPair
| LaunchTime | 2015-09-27T17:58:21.000Z
| Platform |
| PrivateDnsName | ip-172-31-56-164.ec2.internal
```

Marnie Scully HW#3

Get the password and connect as before. If it comes back blank use the original password given when creating the first instance.



```
marnie$ aws ec2 get-password-data --instance-id i-532f14f0 --priv-launch-key CliKeyPair.pem
+-----+
|           Get PasswordData           |
+-----+
| InstanceId | PasswordData          |      Timestamp      |
+-----+-----+-----+
| i-532f14f0 | [long hex string] | 2015-09-27T18:00:15.000Z |
+-----+-----+-----+
```

Verify the new Instance has the same modification (Java)

