Cloud Homework instructions for AWS default instance (Red Hat based)

by Manuel Corona

Automatic updates:

Setting up automatic updates:

```
$ sudo nano /etc/yum/yum-updatesd.conf
```

Look for the line that says

Do_update = no

And change it to

Do_update=yes

Save the file with ctrl + o

And restart the update service

```
$ sudo /sbin/servide yum-updatesd restart
```

For more details:

http://fedoraproject.org/wiki/AutoUpdates

NTP Update:

This instance already came with NTP; no changes are needed though if you want to check the configuration:

```
$ cat /etc/ntp.conf
```

For the cron entry:

```
$ cat /etc/cron.daily/tmpwatch
```

This script will update the time each day. In the file provided with Francisco they show how to use the ntp servers from Ubuntu, I recommend using the ones provided by amazon as they have lower latencies.

The list is the following:

0.amazon.pool.ntp.org

1.amazon.pool.ntp.org

2.amazon.pool.ntp.org

3.amazon.pool.ntp.org

LAMP (Linux Apache MySQL PHP):

In fedora the web server although being apache has a different package name in this case httpd (or http daemon)

To install this package use the following commands:

```
$ sudo yum install httpd
```

and say yes when asked.

To start the service:

```
$ sudo /sbin/service/httpd start
```

In the document provided by Francisco several configuration flags appear, none of this are essential, unless special requirements are needed, opening unusual files, or using a non-default port for http.

For PHP the commands are similar:

```
$ sudo yum install php
```

And agree for the requirements with yes:

To make these changes apply we must restart the httpd service:

```
$ sudo /sbin/service/httpd restart
```

To test if php is running create a file named php-test.php:

```
$ sudo nano /var/www/html/php-test.php
```

And add the following code:

```
<?php phpinfo();?>
```

To see if this command worked use your public dns name and the path in a browser:

http://<mypublicdns>/php-test.php

If a page with lots of information in displayed instead of the code typed then php was setup correctly.

For security reasons is recommendable to delete this webpage afterwards as it provides useful information to a potential attacker.

To do this:

```
$ sudo rm /var/www/http/php-test.php
```

Save the file with ctrl+o and exit with ctrl+x

To install MySQL:

Issue the following command:

```
$ sudo yum install mysql mysql-server php-mysql
```

Agree with the dependencies with yes.

This command will also install the dependencies required to make PHP work with MySQL.

To start MySQL issue the following command:

```
$ sudo /sbin/service mysqld start
```

By default MySQL instance is insecure (root password is blank) we can secure it by issuing the following command:

```
$ sudo /usr/bin/mysql_secure_installation
```

Answer yes to all the questions and use [enter] for the root password at the beginning, afterwards use a secure password that you can remember when the new root password is asked.

To make this daemons start at when the instance is booted we must issue this commands:

```
$ sudo /sbin/chkconfig httpd on

$ sudo /sbin/chkconfig mysqld on
```

Now a LAMP server is installed in your instance.

Installing Mediawiki:

One of the LAMP applications described in the manual is Mediawiki, this application provides a wiki application, to install this we must download and extract the latest version first, as there is no package in the repositories

```
$ cd /opt

$ sudo wget http://download.wikimedia.org/mediawiki/1.17/mediawiki-1.17.0.tar.gz

$ sudo tar xzvf mediawiki-1.17.0.tar.gz
```

Once the files are extracted you must make a symbolic link that point to this folder in your web folder:

```
$ cd /var/www/html/

$ sudo ln -s /opt/mediawiki-1.17.0/ wiki
```

After the symbolic link has been created you must restart httpd

```
$ sudo /sbin/service httpd restart
```

Once this steps are finished you just need to type the address of your wiki in a web browser to continue the setup:

http://<mypublicdns>/wiki/

Remember your MySQL root password as it is needed in the wiki configuration.

Congratulations, you now have a wiki installed in your instance!

This concludes the instructions to set up your instance.