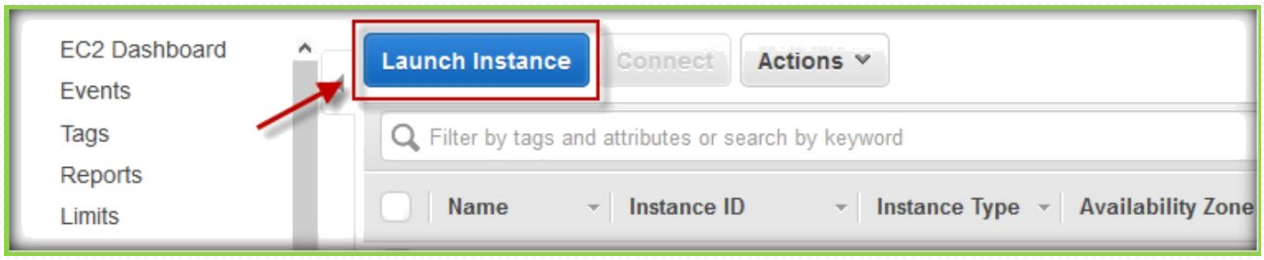
21. BOOT STRAPPING (USER DATA)

When you launch an instance in Amazon EC2, you have the option of passing user data to the instance that can be used to perform common automated configuration tasks and even run scripts after the instance starts.

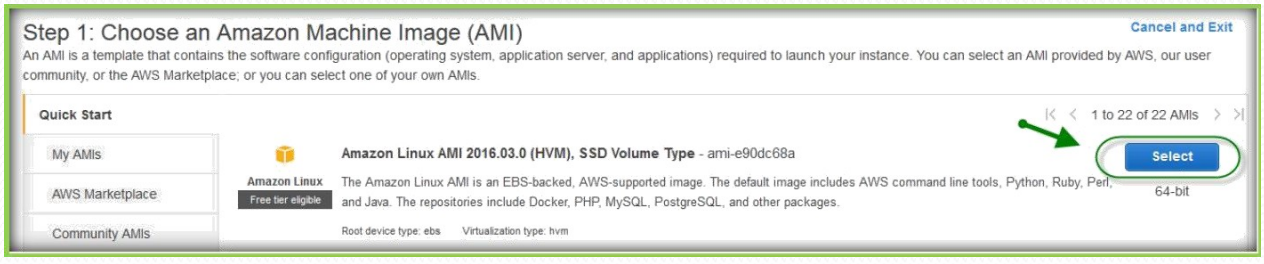
You can also pass this data into the launch wizard as plain text, as a file (this is useful for launching instances via the command line tools), or as base64-encoded text (for API calls).

Navigate to the **EC2 dashboard** from the AWS Console and select **Instances**, located in the left bar under **INSTANCES.**

Choose **Launch Instance** to create a new instance.



Choose **Amazon Linux AMI** from **choose an Amazon Machine Image** dashboard click on **select.**



Choose instance type from the **Choose an Instance Type** dashboard, then click on Next.

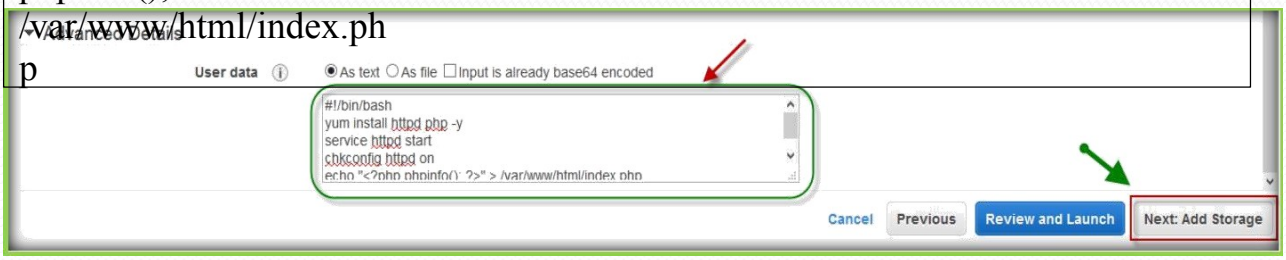
Expand **Advanced Details** section below of the **Configure Instance Details dashboard.**

After expanding Advanced Details section, you will find User data section with a text box.

LINUX USER DATA EXAMPLE

Enter the below the commands in the text field, then choose Next.

```
#!/bin/bash
yum install httpd php -y
service httpd start
chkconfig httpd on
echo "<?php
phpinfo(); ?>" >
/var/www/html/index.ph
p
```



Then go with normal process for creating a new instance, make sure you have selected a security group which has 80(HTTP) port open. Once instance launched, you can browse the IP Address assigned to instance by AWS. You will be displayed with PHP Info page with all PHP settings like below.

PHP Version 5.2.17

System	Linux ecbiz108.inmotionhosting.com 2.6.18-274.7.1.el5 #1 SMP Thu Oct 20 16:21:01 EDT 2011 x86_64
Build Date	Nov 8 2011 22:58:16
Configure Command	'./configure' '--enable-bcmath' '--enable-calendar' '--enable-dbase' '--enable-exif' '--enable-ftp' '--enable-gd-native-ttf' '--enable-libxml' '--enable-magic-quotes' '--enable-mbstring' '--enable-pdo=shared' '--enable-soap' '--enable-sockets' '--enable-sqlite-utf8' '--enable-zend-multibyte' '--enable-zip' '--prefix=/usr' '--with-bz2' '--with-curl=/opt/curlssl/' '--with-curlwrappers' '--with-freetype-dir=/usr' '--with-gd' '--with-gettext' '--with-imap=/opt/php_with_imap_client/' '--with-imap-ssl=/usr' '--with-jpeg-dir=/usr' '--with-kerberos' '--with-libdir=lib64' '--with-libexpat-dir=/usr' '--with-libxml-dir=/opt/xml2' '--with-libxml-dir=/opt/xml2/' '--with-mcrypt=/opt/libmcrypt/' '--with-mhash=/opt/mhash/' '--with-mime-magic' '--with-mm=/opt/mm/' '--with-mysql=/usr' '--with-mysql-sock=/var/lib/mysql/mysql.sock' '--with-mysqli=/usr/bin/mysql_config' '--with-openssl=/usr' '--with-openssl-dir=/usr' '--with-pcre-regex=/opt/pcre' '--with-pdo-mysql=shared' '--with-pdo-sqlite=shared' '--with-pic' '--with-png-dir=/usr' '--with-pspell' '--with-sqlite=shared' '--with-tidy=/opt/tidy/' '--with-ttf' '--with-xmlrpc' '--with-xpm-dir=/usr' '--with-xsl=/opt/xslt/' '--with-zlib' '--with-zlib-dir=/usr'
Server API	CGI
Virtual Directory	disabled

WINDOWS USER DATA EXAMPLE

Enter the below the commands in the text field, then choose Next.

```
<powershell>
Start-Transcript;

# Install IIS
Import-Module ServerManager;
Enable-WindowsOptionalFeature -Online -NoRestart -FeatureName
'IIS- WebServerRole', 'IIS-WebServer', 'IIS-ManagementConsole';
</powershell>
```

Then go with normal process for creating a new instance, make sure you have selected a security group which has 80(HTTP) port open.
Once instance launched, you can browse the IP Address assigned to instance by AWS. You will be displayed with default IIS Info page like below.