# VirtualX

## DEPLOYMENT GUIDE

We strongly recommend our customers to use Linux platforms to deploy VirtualX smoothly and efficiently. You can follow the below given steps to install VirtualX (Tested successfully with different Ubuntu versions).

### Step 1:
*sudo apt-get update*

### Step-2 to Step-6 are to be executed with Ubuntu 10 and 11 versions only

### Step 2:
Next you need to get the compressed package (*tar.gz*) for **rvm 1.0.1**

*https://github.com/wayneeseguin/rvm/archive/1.0.1.tar.gz*

### Step 3:
Extract the contents completely and run **cd** command to move  into the extracted directory.

*tar xvzf rvm-1.0.1.tar.gz*

Once the user is inside the extracted directory, run the *installer* from the command prompt/console.

*./install*

### Step 4:
Place the following line at the end of your shell's loading files (.bashrc or .bash_profile for bash and .zshrc for zsh), after all path/variable settings:

*[[-s $HOME/.rvm/scripts/rvm]] && source $HOME/.rvm/scripts/rvm*

### Step 5:
*source /home/{username}/.bashrc*

*{username}* – This is the username of the currently logged in user, please update it accordingly.

### Step 6:
*sudo aptitude install build-essential bison openssl libreadline5 libreadline5-dev curl git zlib1g zlib1g-dev libssl-dev libxml2-dev libmysqlclient-dev libcurl3 libcurl3-gnutls libcurl4-openssl-dev*

**Step-7 to Step-9 are to be executed with Ubuntu 12, 13 and 14 versions only**

### Step 7:

Next you need to get the rvm stable version installed. Please execute the below given command for it.

*curl -L https://get.rvm.io | bash -s stable --autolibs=enabled*

### Step 8:

Run the command:
*source /home/{username}/.rvm/scripts/rvm*

*{username}* – This is the username of the logged in user, please update it accordingly.

### Step 9:

Run the command:

*sudo apt-get  install build-essential bison openssl libreadline5  curl git zlib1g zlib1g-dev libssl-dev libxml2-dev libmysqlclient-dev libcurl3 libcurl3-gnutls libcurl4-openssl-dev*

**Step-1 and Step-10 to Step-24 are to be executed commonly for all Ubuntu versions**

### Step 10:

Run the command:

*sudo apt-get install mysql*

if and only if  you are getting the below given error, please follow the below given steps, otherwise move on to **Step-12**.

E: Unable to locate package libruby1.8
E: Couldn't find any package by regex 'libruby1.8'
E: Unable to locate package libmysql-ruby1.8

Open the file:

*/etc/apt/sources.list*

You can use the following VIM editor command to open it in the command prompt and to update the same. You can use any other editor also to perform the same.

Run the command:

*sudo vi /etc/apt/sources.list*

Make sure that the file got opened in the console. Then using INSERT mode, please add the below given line on top of the file.

*deb http://cz.archive.ubuntu.com/ubuntu precise main universe*

Now, update/save the file using VIM commands(Please get help from some one who has real knowledge in managing VIM editor).

Then, run the below command in the console/command prompt.

*sudo apt-get update*

*sudo apt-get install libruby1.8 libmysql-ruby1.8 libcurl4-gnutls-dev*

**Step 11:**
*rvm install ruby-1.8.7*

**Step 12:**
*rvm use ruby-1.8.7 --default*

**Step 13:**
*gem install rails --version 3.0.3*

copy the source code of 'VirtualX' to the below folder location in the server.

*/var/www*

Move to the VirtualX root folder using the below given command.

*cd VirtualX*

**Step 14:**
Run the command:

*bundle install*

## Step 15:

Database Configuration Settings – Refer *[app root]/config/database.yml.example* to configure database settings and save the settings file as *[app root]/config/database.yml*

Update MySQL login credentials in */var/www/VirtualX/config/database.yml* file that you have just created.

## Step 16:

We assume that you have installed MySQL and configured it properly in order to move on with the below given steps.
Run the command:

*rake db:create RAILS_ENV=production*

## Step 17:

Run the command:

*rake db:migrate RAILS_ENV=production*

## Step 18:

Run the command:

*rake db:seed RAILS_ENV=production*

## Step 19:

Configure SMTP Settings – Update *[app root]/config/initializers/setup_mail.rb* file with the Email SMTP settings.

Since we use Gmail SMTP settings, please update *setup_mail.rb* file with a proper Gmail email-id and its password to make email notifications to be sent properly.

## Step 20:

Run the command:

*gem install passenger*

## Step 21:

Run the command:

*sudo apt-get install apache2-dev  apache2*

## Step 22:

Run the command:

*passenger-install-apache2-module*

## Step 23:

As per the instructions you might have got while performing Step-22, please update the Apache configuration file as given below.

Run the below command in console to get the apache configuration file opened in a VIM editor:

*sudo vi /etc/apache2/apache2.conf*

Make sure it opened the *apache2.conf* file in console and using *INSERT* mode, insert the below line inside the file and then save it properly:

```
LoadModule passenger_module /home/{username} /.rvm/gems/ruby-1.8.7-
head/gems/passenger-4.0.45/buildout/apache2/mod_passenger.so
  <IfModule mod_passenger.c>
   PassengerRoot /home/{username} /.rvm/gems/ruby-1.8.7-head/gems/passenger-
4.0.45
   PassengerDefaultRuby /home/{username} /.rvm/gems/ruby-1.8.7-
head/wrappers/ruby
  </IfModule>
```

*{username}* – This is the username of the logged in user, please update it accordingly.

Then create a Virtual host configuration file named *virtualx*  for VirtualX in the below given path:
*/etc/apache2/sites-enabled/*

For the same, use VIM editor commands in console.

*sudo vi /etc/apache2/sites-enabled/virtualx*

Make sure the file opens up in console/command prompt and using *INSERT* mode in VIM commands, please add these lines to the file *virtualx.*

```
<VirtualHost *:80>
    ServerName virtualx
    ServerAlias 192.168.0.119
    DocumentRoot /var/www/virtualx/public
    <Directory /var/www/virtualx/public>
       AllowOverride all
       Options -MultiViews
    </Directory>
     ErrorLog /var/log/apache2/virtualerror.log
     LogLevel warn
     CustomLog /var/log/apache2/virtualaccess.log combined
 </VirtualHost>
```

## Step 24:

Run the below commands then:

*a2dissite 000-default.conf*

*a2ensite virtualx.conf*

*service apache2 restart* OR */etc/init.d/apache2 restart*

## Wkhtmltopdf

PDFKit depends on wkhtmltopdf for converting HTML page to PDF, this is used for one of the PDF report type in VirtualX.

Please download *wkhtmltopdf Binary file* from the web and copy it to the desired location.

Set the path to your *wkhtmltopdf* file in *pdfkit_config.rb* file inside *[app_root]/config/initializers* path.

*path set in the application is '*/home/user/wkhtmltopdf/'

**NOTE:** *We recommend using any of the best supported Ubuntu platforms (versions from 10.04LTS up to 14.04LTS) for the deployment of VirtualX. If you find it difficult to get it through, please revert to us with your query at* [enquiries@pitsolutions.com](mailto:enquiries@pitsolutions.com).

*Happy Deployment!*