DVS-100/200 Installation Guide

DVS-100/200 can be installed on any system running the Ubuntu 14.04 64 bit Linux operating system, the guide below covers some common installation scenarios.

The installation procedure for DVS-100 and DVS-200 is the same. Once installed the software will be running in free mode (DVS-100) you must install a valid licence to enable DVS-200 features.

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System resource recommendations

The guide below makes some recommendations on system specifications, please use these as guidelines only. We assume one 1Mbps video stream with 96Kbps audio, the max viewer count is per instance (per server).

On-Premise Installations

8GB of RAM and a SSD (Solid state drive) is recommended for larger audiences, approximate network limitations are as below.

Network Speed	Viewers (Per Instance)
10 Mbps	8
100 Mbps	80
1000 Mbps	800

Add more instances or additional network interfaces as audience size increases

For encoding / transcoding HD video we recommend a 4 core 7th generation i7 CPU and 8GB ram at minimum.

Cloud hosting installations

Hosting Examples

Digital Ocean

Digital Ocean is ideal for scenarios with low viewer counts.

All Digital Ocean instances share a 1Gbps connection to the internet, Digital Ocean recommend consistently not exceeding 300Mbps I/O.

Hosting Plan	Viewers (Per Instance)
$5 USD PM	50
$10 USD PM	150

Add more instances as audience size increases

Amazon AWS

Hosting Plan	Viewers (Per Instance)
M1.small	120
M1.medium	285
m1.xlarge	570

Add more instances as audience size increases

Massive Grid

Massive grid offer affordable dedicated servers with dedicated 1Gbps connectivity.

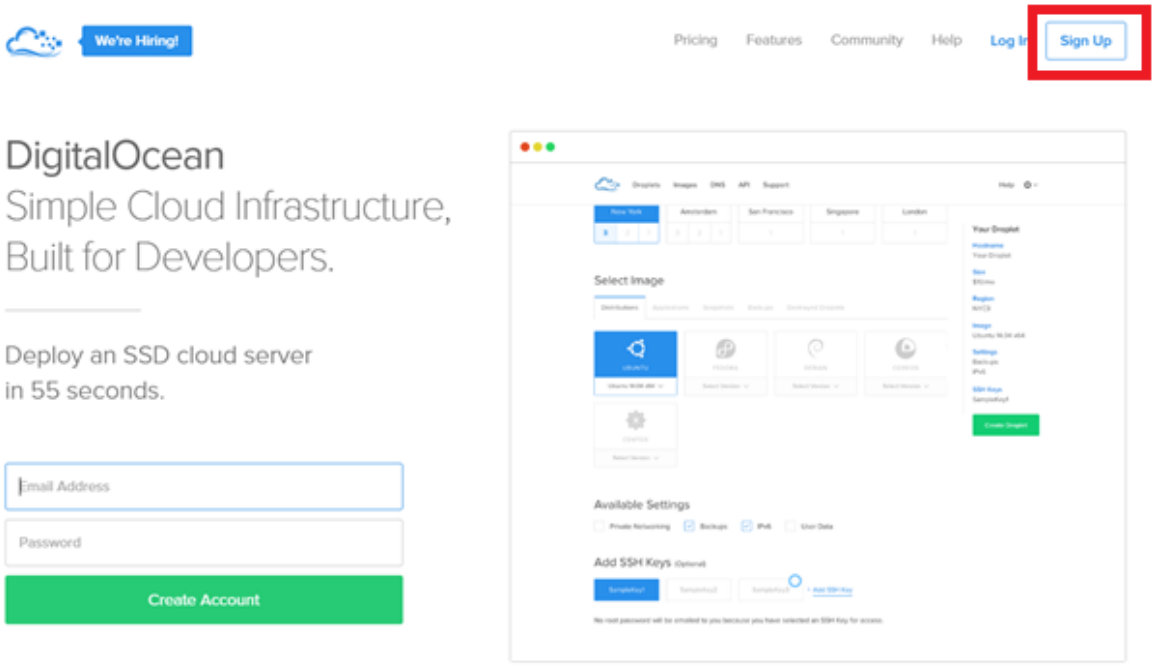
Hosting Plan	Viewers (Per Instance)
Managed Dedicated I	800

Add more instances as audience size increases

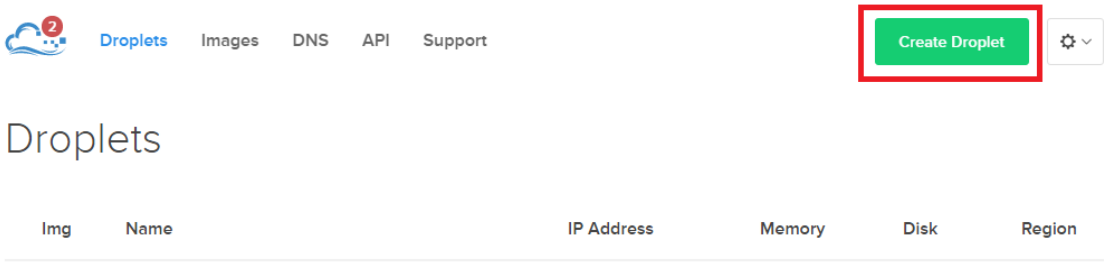
Installation Walkthroughs

Digital Ocean

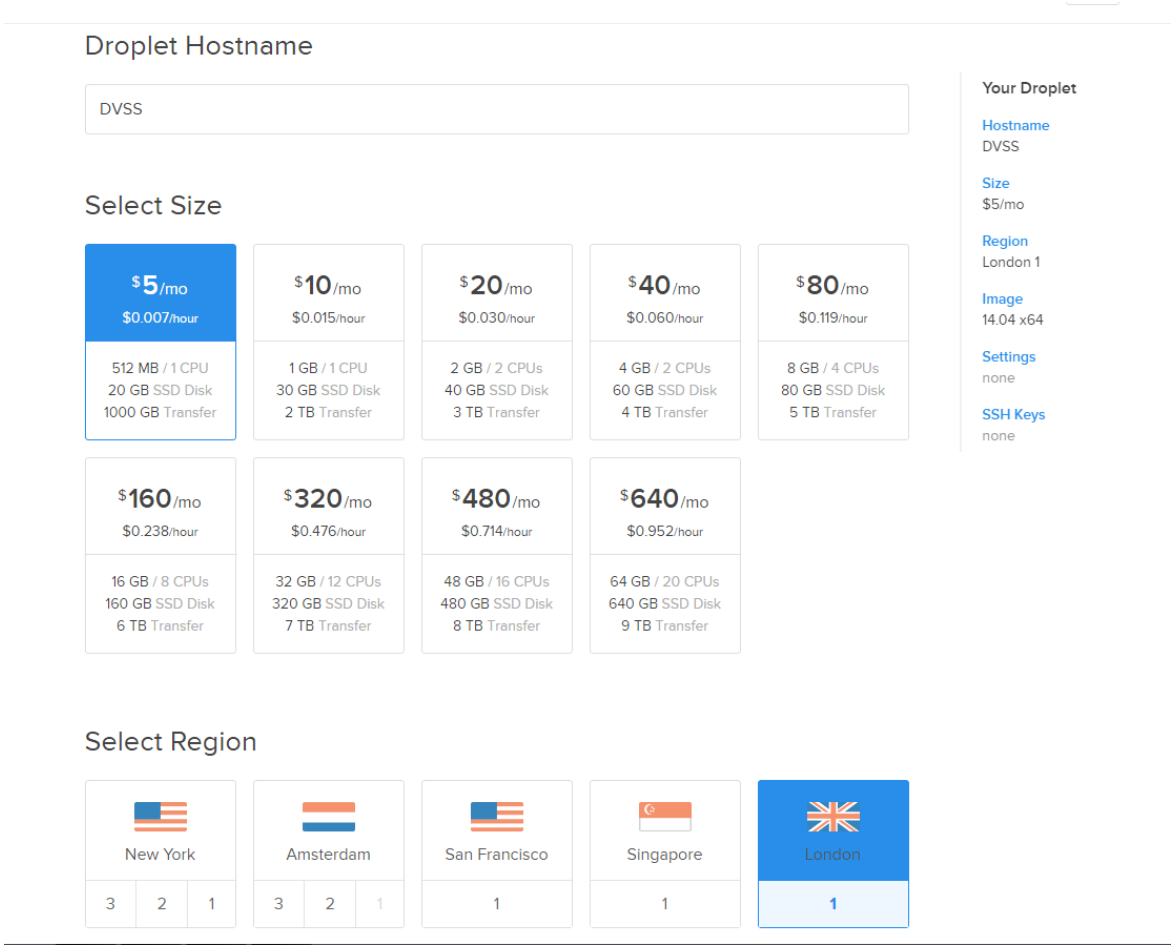
Visit www.digitalocean.com and sign up for a new account



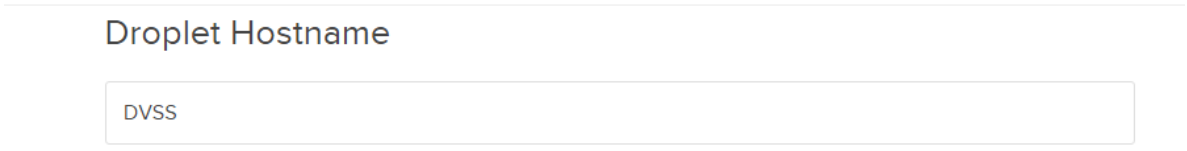
Once you have created your account click the 'Create Droplet' button



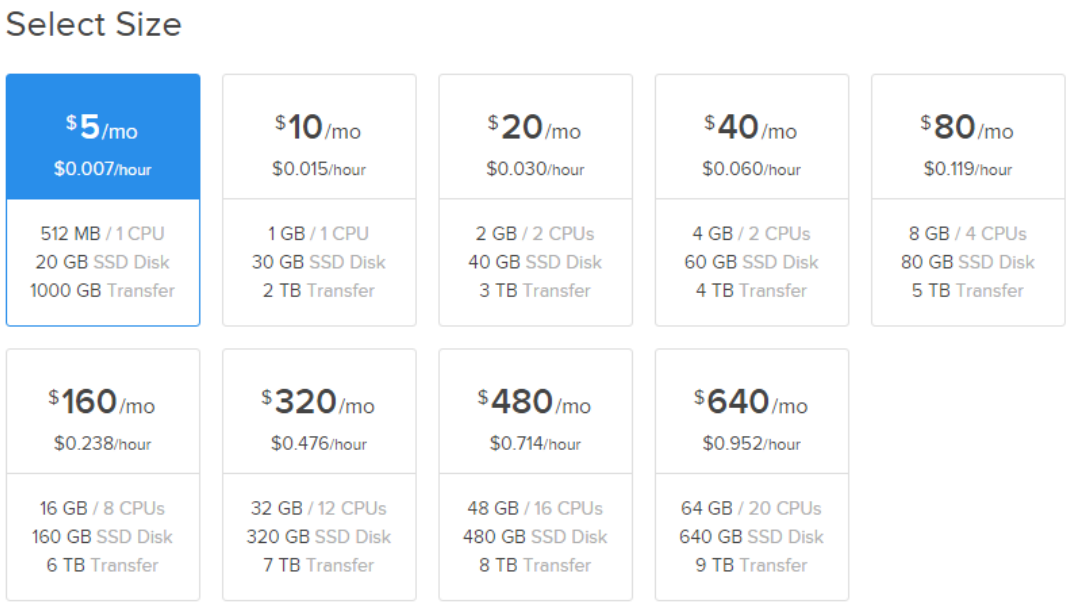
You will see the page below.



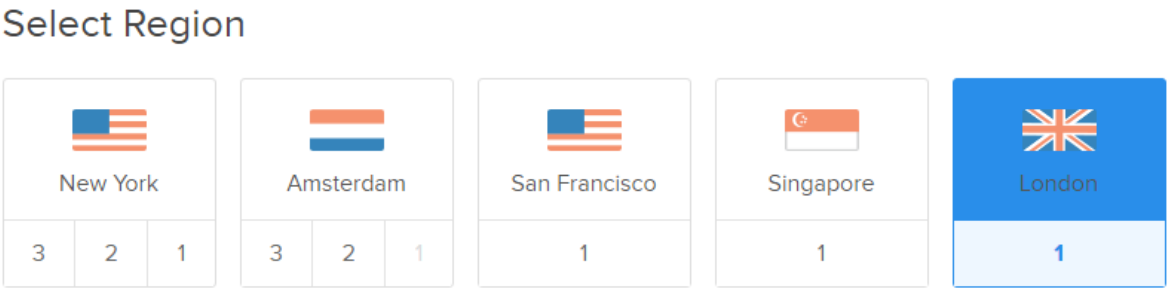
First give your Droplet a hostname, here I have chosen DVSS.



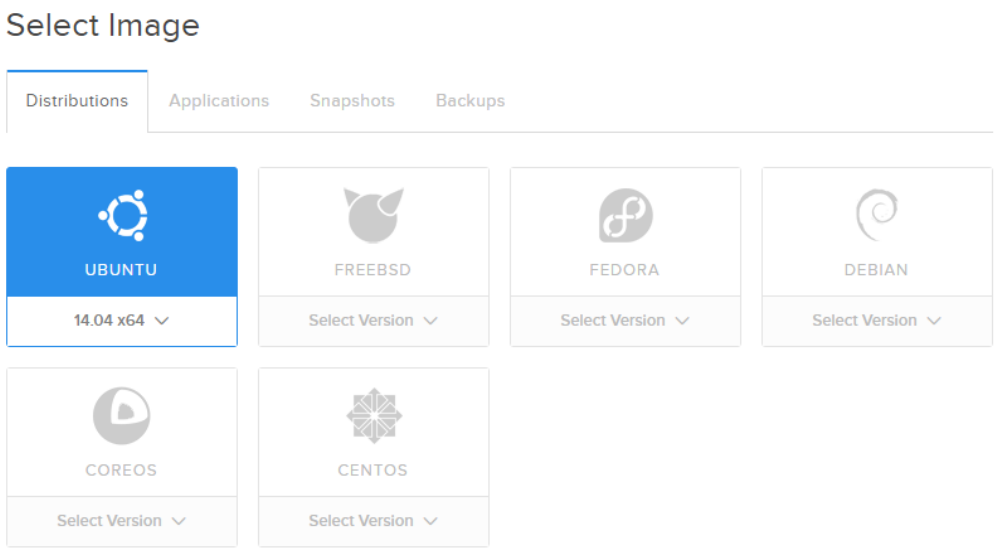
Next choose a size, the size required depends on how many users you need to serve. Use the guide at the begging of this document to help with selection.



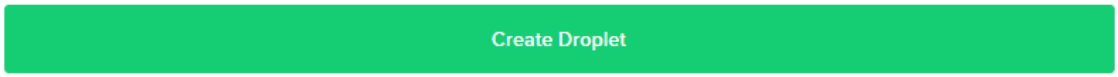
Next select the region closest to you for best performance.

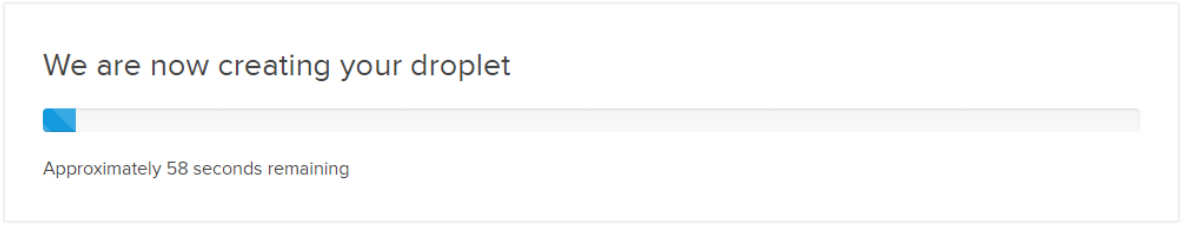


Finally you need to select an image, please choose Ubuntu 14.04 x64.

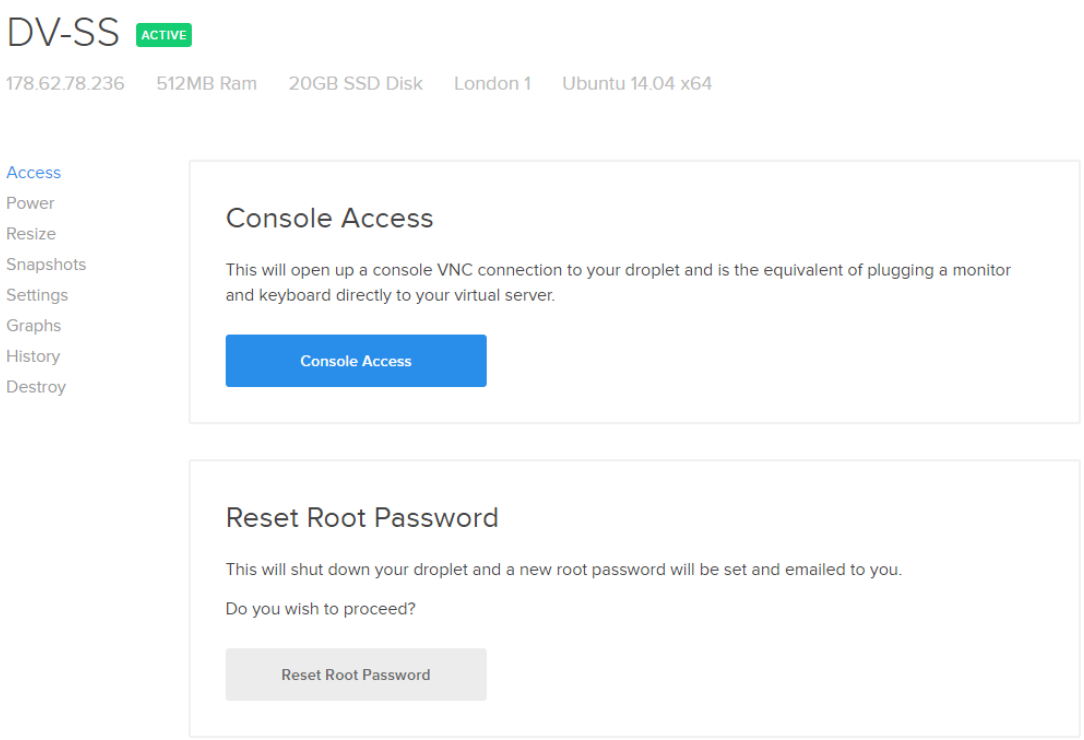


Ignore the ‘Available Settings’ and ‘Add SSH Keys (optional)’ sections and create the droplet.

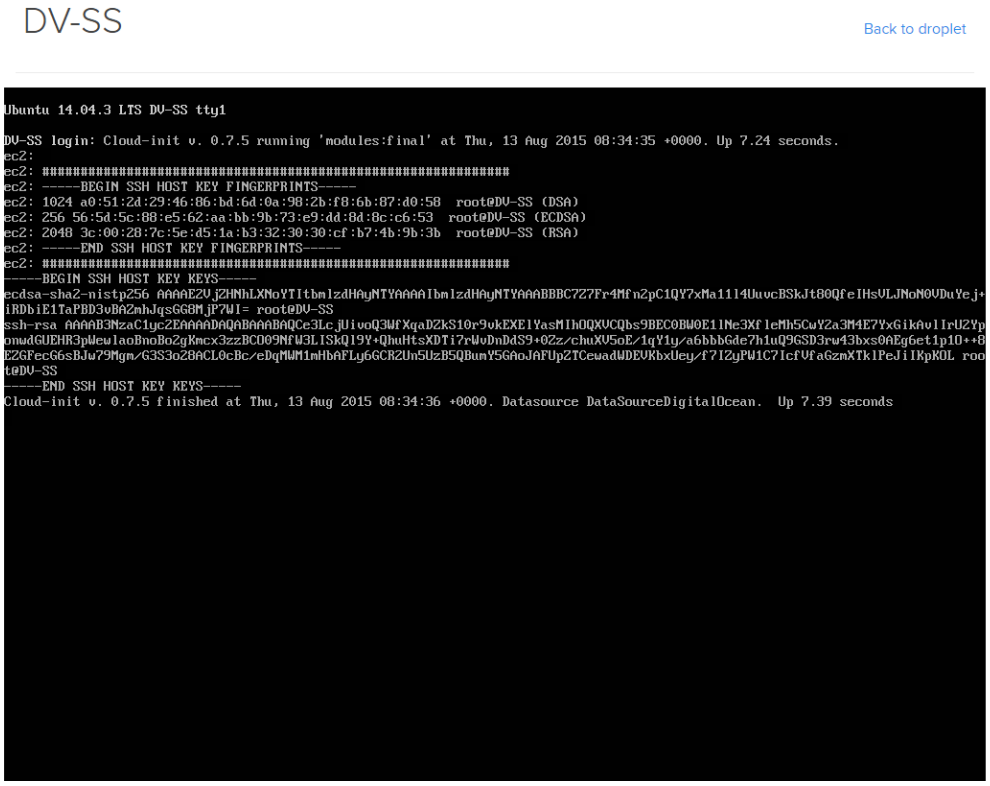




Once the droplet has been created you will see the page below. We are now ready to install the stream server software.

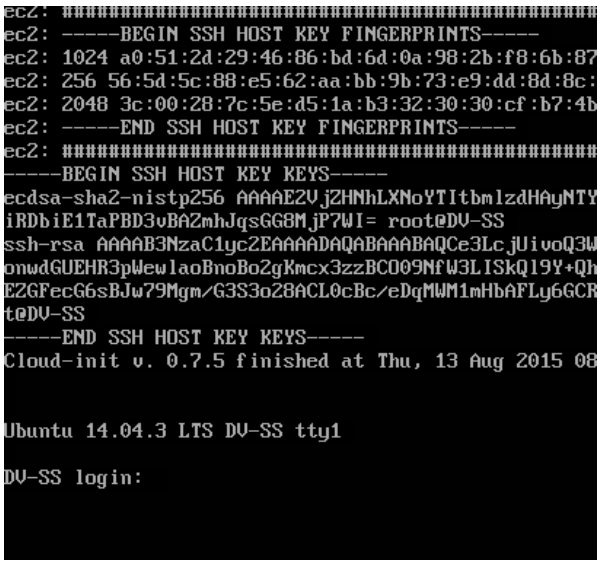


Click the blue ‘Console Access’ button, you will see the page below



Hit return on the keyboard and you will be asked to login. The username and password for your server will have been e-mailed to you by Digital Ocean. Enter your username and hit the return key, then enter your password and again hit the return key to login **(please note you will not see any characters appear on screen when typing your passwords)**.

You will be asked to change your password the first time you login, please ensure you use a password that is at least 10 characters long it should be uppercase and lowercase and contain characters such as $%&@# for security.

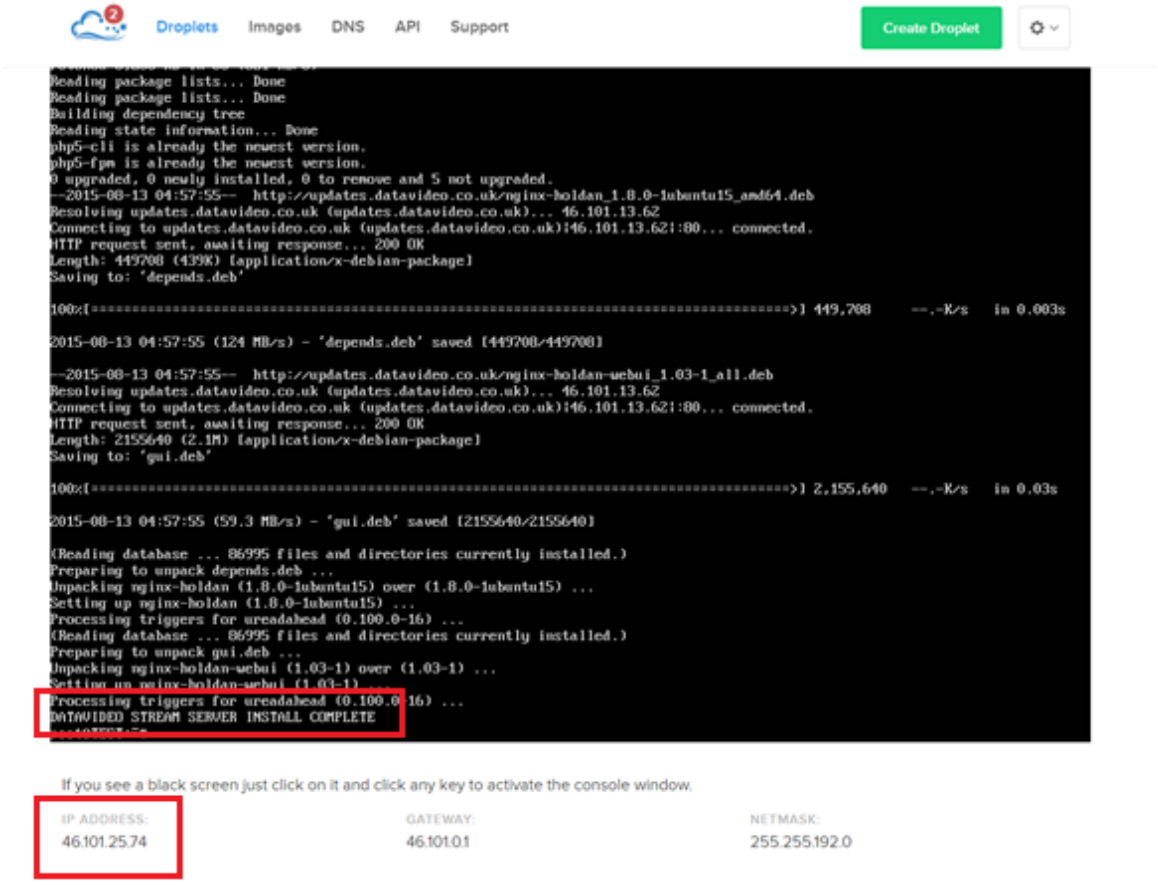


Once logged in type the commands below in order, hit return after each command.

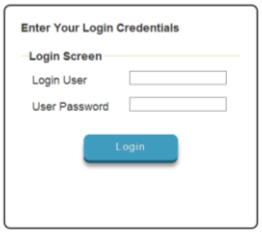
wget http://updates.datavideo.co.uk/install-dvss.sh

bash install-dvss.sh

You will see the message below once the installation is complete.



Now simply enter the IP address displayed into a web browser to access the login page.

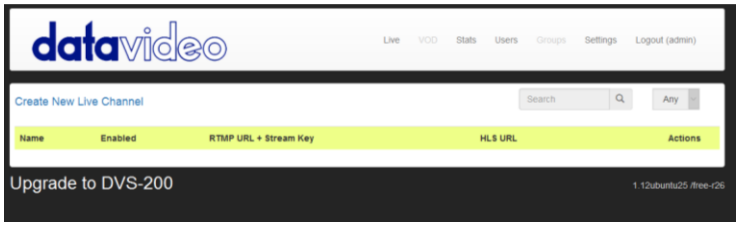


The default credentials are:

User: admin

Password: 000000

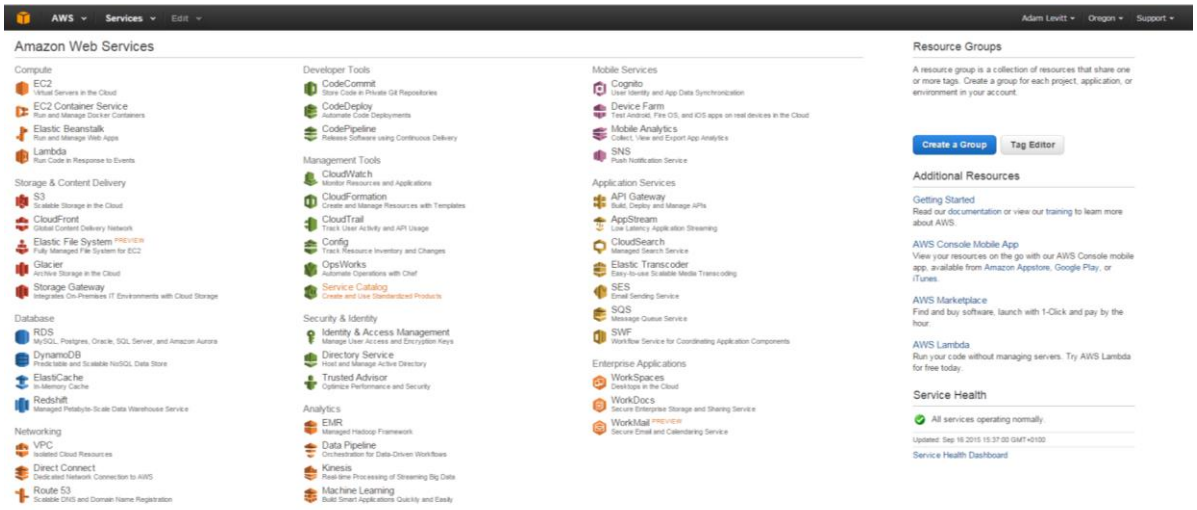
After logging in you will see the software is running in free (DVS-100) mode, to enable DVS-200 features you need a valid licence.



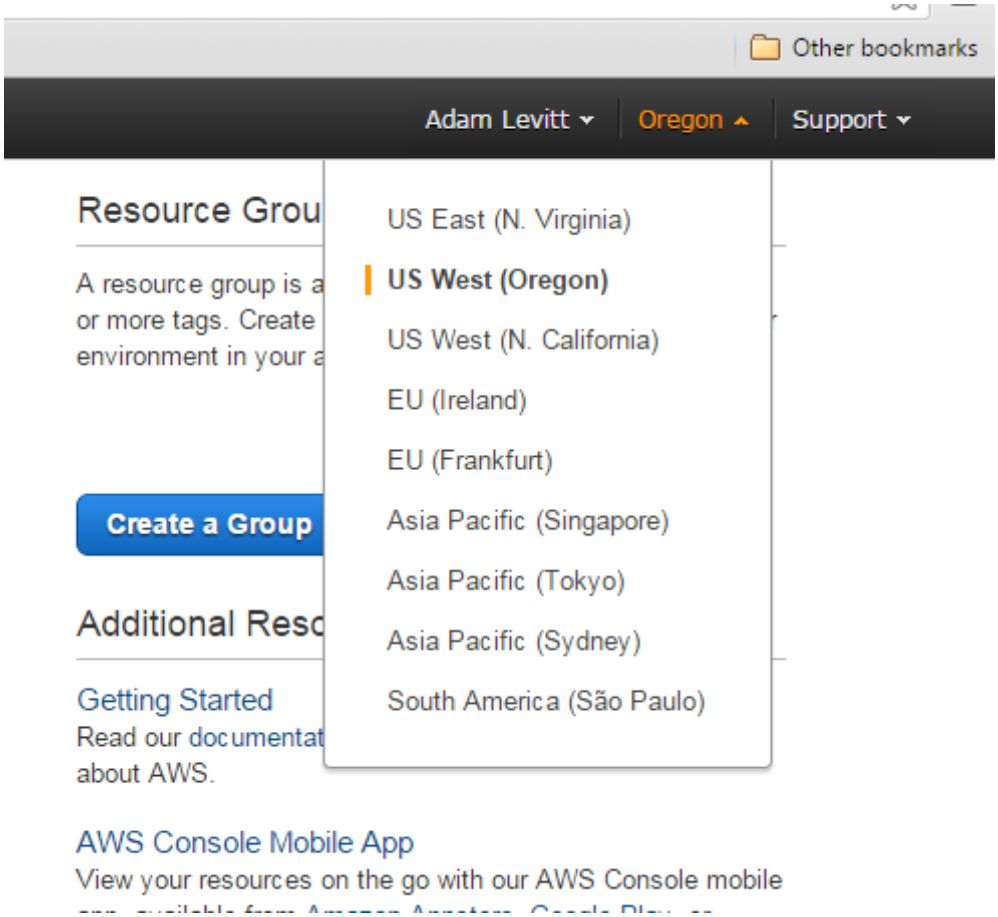
Installation on Amazon AWS Cloud

Visit http://aws.amazon.com and sign up for a new account

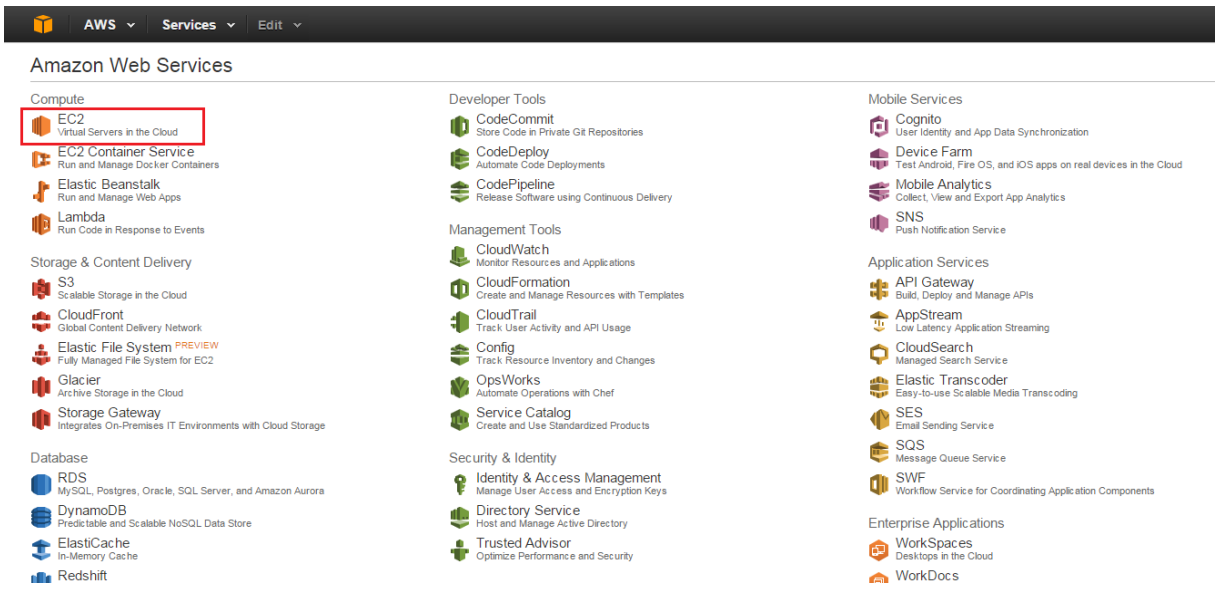
Once you have created your account sign in and you will see the page below



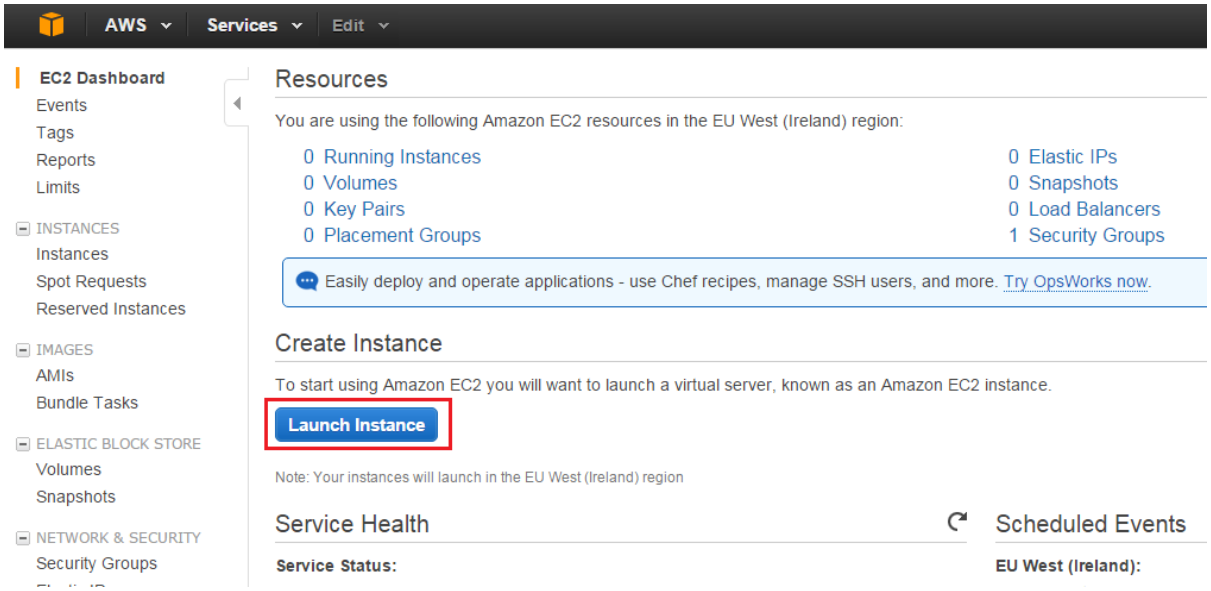
First change the region in the top right corner to the region where you would like to setup your cloud server



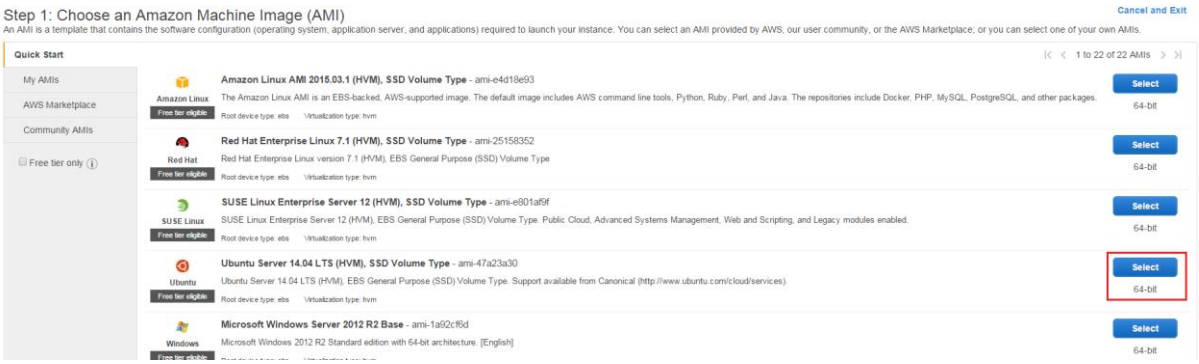
Now click the ‘EC2’ link under compute to the left of the page



Click the ‘Launch Instance’ button



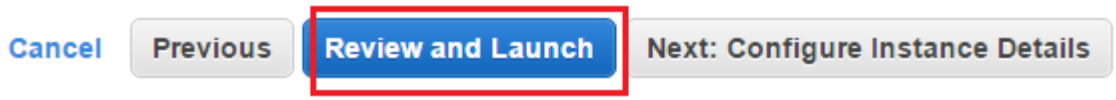
Select the Ubuntu 14.04 64 bit image as shown below



Now select your instance type, the size required depends on how many users you need to serve. Use the guide at the begging of this document to help with selection.

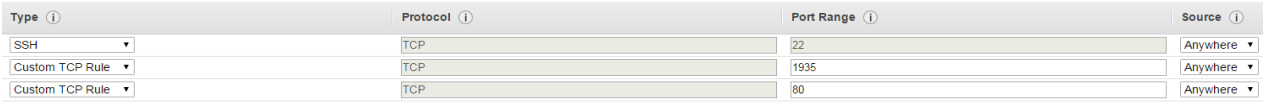
	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
■	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate
	General purpose	t2.small	1	2	EBS only	-	Low to Moderate
	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate
	General purpose	t2.large	2	8	EBS only	-	Low to Moderate
	General purpose	m4.large	2	8	EBS only	Yes	Moderate
	General purpose	m4.xlarge	4	16	EBS only	Yes	High
	General purpose	m4.2xlarge	8	32	EBS only	Yes	High
	General purpose	m4.4xlarge	16	64	EBS only	Yes	High
	General purpose	m4.10xlarge	40	160	EBS only	Yes	10 Gigabit
	General purpose	m3.medium	1	3.75	1 x 4 (SSD)	-	Moderate
	General purpose	m3.large	2	7.5	1 x 32 (SSD)	-	Moderate

One you have selected and instance size proceed and click the ‘Review and Launch’ button.

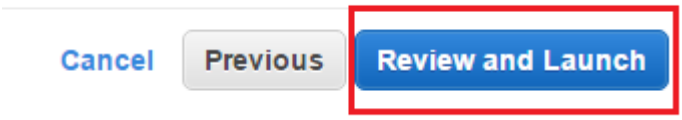


Click the ‘Edit security groups’ link

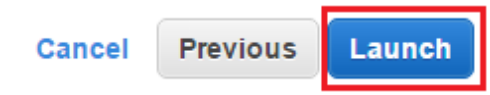
Add two new custom TCP rules for ports 80 and 1935 as shown below.



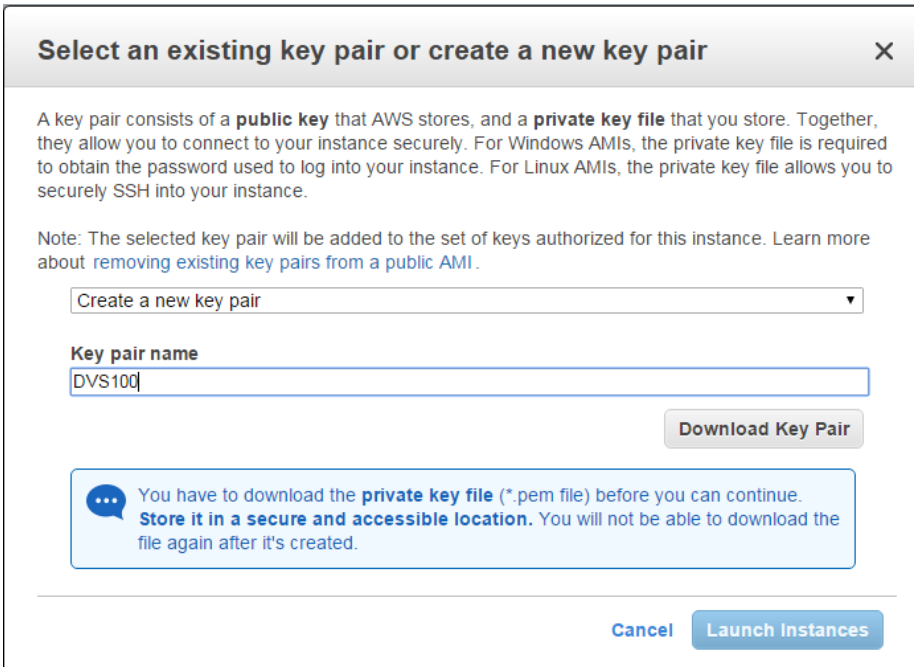
Click the ‘Review and launch’ button again



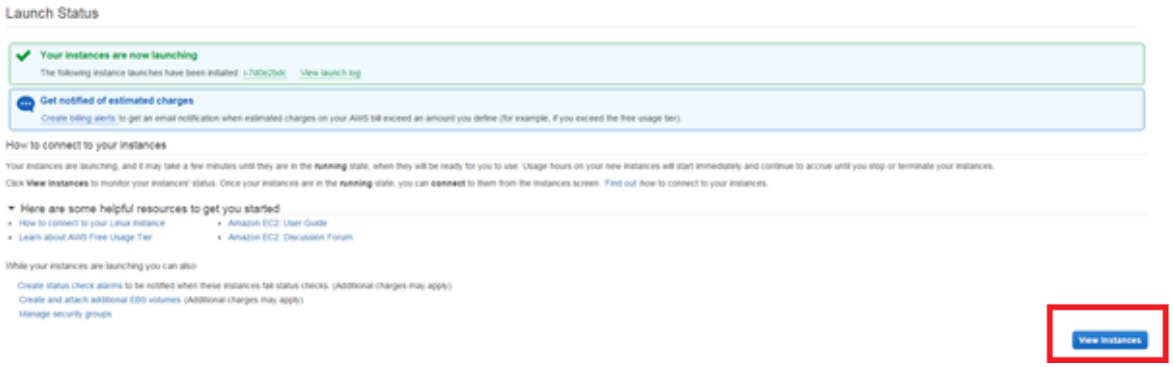
Click the ‘Launch’ button



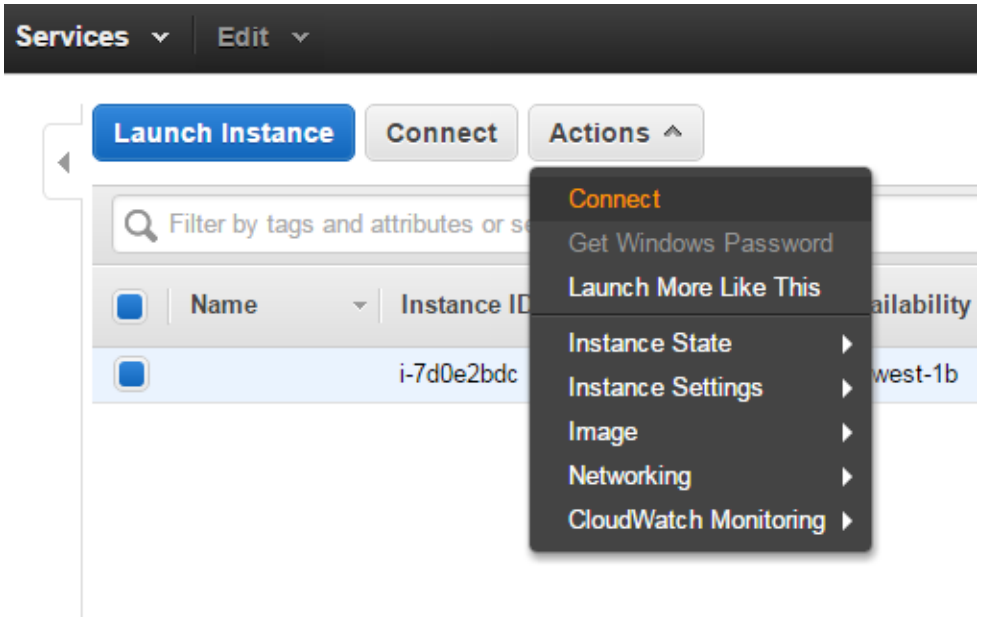
You will see the prompt blow. Choose to create a new key pair and give the key pair a name.



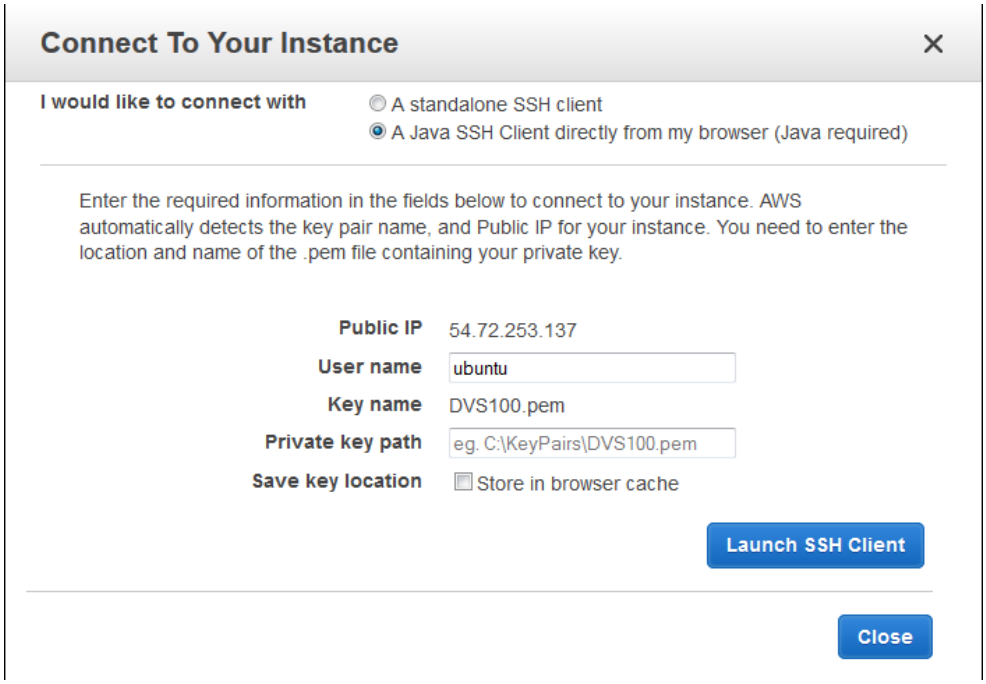
Click the ‘Download Key Pair’ button and save the file somewhere safe (you will need it later) before clicking the ‘Launch Instance’ button. You will see the page below, click the ‘View Instances’ button to proceed.



Select ‘Connect’ from the actions menu



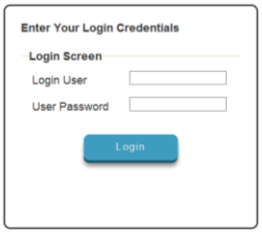
You will see the prompt below. Follow the instructions to connect to your instance via SSH.



Once connected via SSH execute the following commands on the server.

wget http://updates.datavideo.co.uk/install-dvss.sh -O - | bash

Once installation is complete enter the instances public IP or public DNS into a web browser to connect to the DVS-200 web interface.

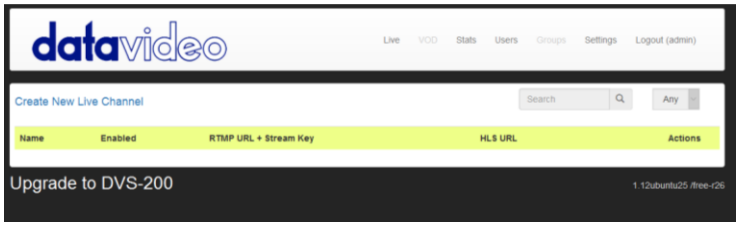


The default credentials are:

User: admin

Password: 000000

After logging in you will see the software is running in free (DVS-100) mode, to enable DVS-200 features you need a valid licence.



Generic Installation Instructions (All Providers)

Automated Script

The following command can be executed on any system running the Ubuntu 14.04 64 bit Linux operating system.

Ensure the system has internet access and execute the commands below as the root user to install DVS-200.

wget http://updates.datavideo.co.uk/install-dvss.sh -O - | bash

After a successful installation the stream server's web interface will be running on port 80.

Manual installation (Advanced Users)

Prerequisites

libasound2 libyaml-0-2 libass4 libmp3lame0 libopencore-amrnb0 libopencore-amrwb0 libopus0 libpulse0 libsdl2-2.0-0 libsoxr0 libspeex1 libva-drm1 libva-x11-1 libva1 libvdpau1 libwavpack1 libx264-142 libxcb-shape0 libxcb-shm0 libxv1 libxvidcore4 libluajit-5.1-2 libluajit-5.1-common libdouble-conversion1 liblz4-1 libpq5 libsnappy1 php5-fpm php5-cli binutils ghostscript gsfonts imagemagick-common libavahi-client3 libavahi-common-data libavahi-common3 libboost-context1.54.0 libboost-filesystem1.54.0 libboost-program-options1.54.0 libboost-regex1.54.0 libboost-system1.54.0 libboost-thread1.54.0 libc-client2007e libcups2 libcupsfilters1 libcupsimage2 libfftw3-double3 libgd3 libgflags2 libgoogle-glog0 libgs9 libgs9-common libijs-0.35 libjasper1 libjbig0 libjbig2dec0 libjemalloc1 libjpeg-turbo8 libjpeg8 liblcms2-2 liblqr-1-0 libltdl7 libmagickcore5 libmagickwand5 libmcrypt4 libmemcached10 libmysqlclient18 libonig2 libpaper-utils libpaper1 libsqlcipher0 libtbb2 libtiff5 libunwind8 libvpx1 libxpm4 libxslt1.1 mlock mysql-common poppler-data

Packages

http://updates.datavideo.co.uk/updates/debian/hhvm_3.15.2~trusty_amd64.deb

http://updates.datavideo.co.uk/updates/debian/ffmpeg_3.1.4+git1~trustyubuntu1_amd64.deb

http://updates.datavideo.co.uk/updates/debian/nginx-dvss_1.8.0-4ubuntu34_amd64.deb

http://updates.datavideo.co.uk/updates/debian/nginx-dvss-webui_1.12ubuntu25_all.deb