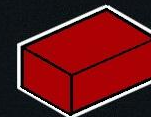
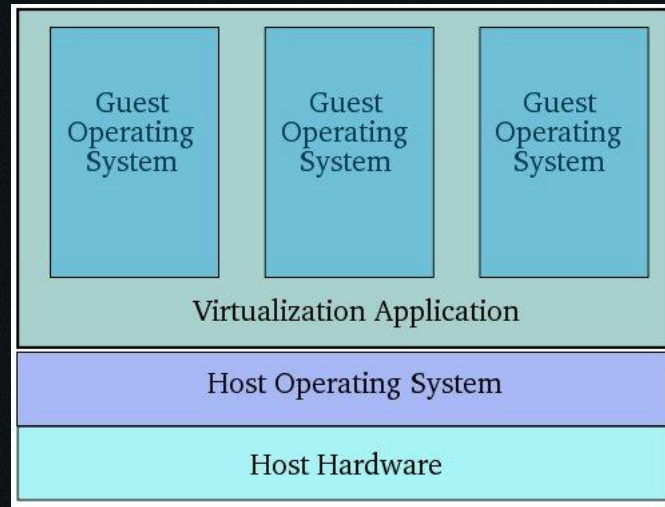


Admin Training: VM's Setup 'em up to knock em down!

November 5th 2014

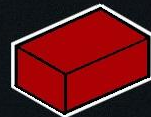
What is a VM?

- VM = Virtual Machine
- Operating system that runs on top of a **HYPERVISOR**
 - VMware, virtualbox, xen.



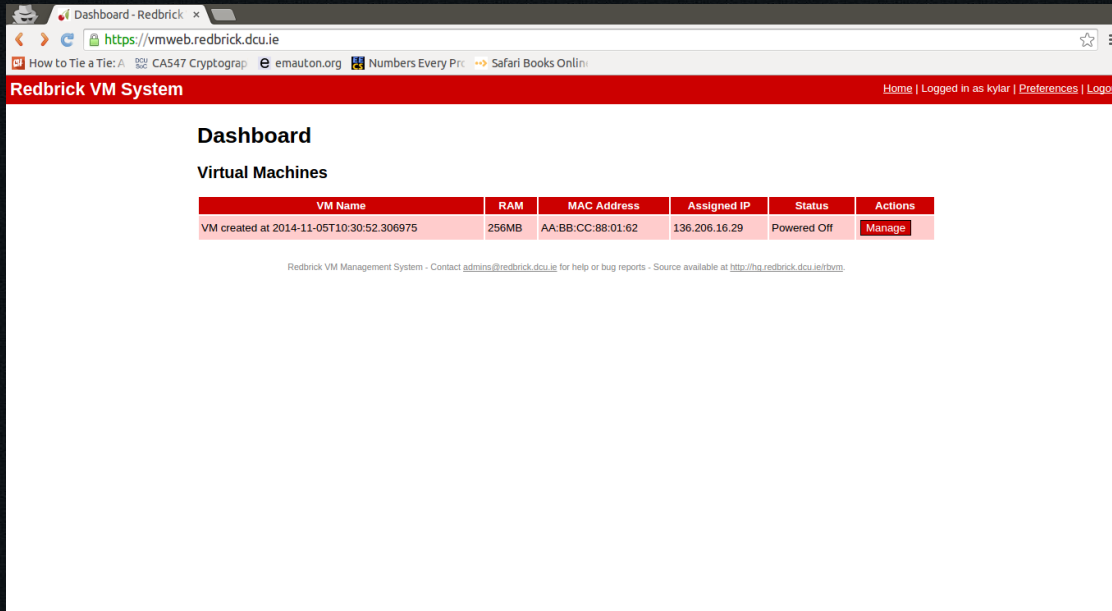
Why use one?

- Having access to an alternative operating system.
- Running some software that you don't want to run on your own laptop/desktop.
- Common uses for me:
 - Practicing your "rm -rf /"
 - Relaying http traffic to get around firewalls
 - Testing any networked software that I write.
 - CASE 2nd year OS



Lets get started.

1. Go to “vmweb.redbrick.dcu.ie”
2. Login with your VM account details.
3. Click “Manage” on the VM that’s listed.



The screenshot shows a web browser window with the URL <https://vmweb.redbrick.dcu.ie>. The page title is "Redbrick VM System" and the user is logged in as "Kylar". The main content area is titled "Dashboard" and "Virtual Machines". It displays a table with the following data:

VM Name	RAM	MAC Address	Assigned IP	Status	Actions
VM created at 2014-11-05T10:30:52.306975	256MB	AA:BB:CC:88:01:62	136.206.16.29	Powered Off	Manage

Below the table, there is a footer note: "Redbrick VM Management System - Contact admins@redbrick.dcu.ie for help or bug reports - Source available at <http://hq.redbrick.dcu.ie/vm/>."

Manage VM

VM Name	VM created at 2010-03-05T18:50:56.937498 Change	RAM	256MB
Last Launch		CPU Cores	1
Primary MAC	AA:BB:CC:FC:9C:D1	Primary IP	136.206.16.110
Disk Image	disk_1ED24C7fAeBbF8a93d0c.img		
Status	Powered Off		

Boot order

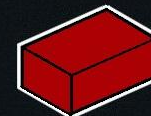
Your virtual machine is currently set to boot from the CD drive.

Select a different boot order here [Change](#)

Actions

[Power On VM](#)

- Hardware: Select "virtio" and click on "Change NIC Device"
- Power On VM
- TAKE DOWN THE DETAILS THAT ARE SHOWN
- Mount ISO
- Reset VM



Access Over VNC

- Open a terminal
- Use the ssh command.
- Now on your local pc,
- Open VNC client and connect to localhost port 5900

Redbrick VM System

[Home](#) | [Logged in as testing](#) | [Preferences](#) | [Logout](#)

VM Power On

VM power on successful

To connect to your virtual machine's VNC server:

1. Connect to redbrick, SSH forwarding port 5900 to 136.206.16.1:5913:

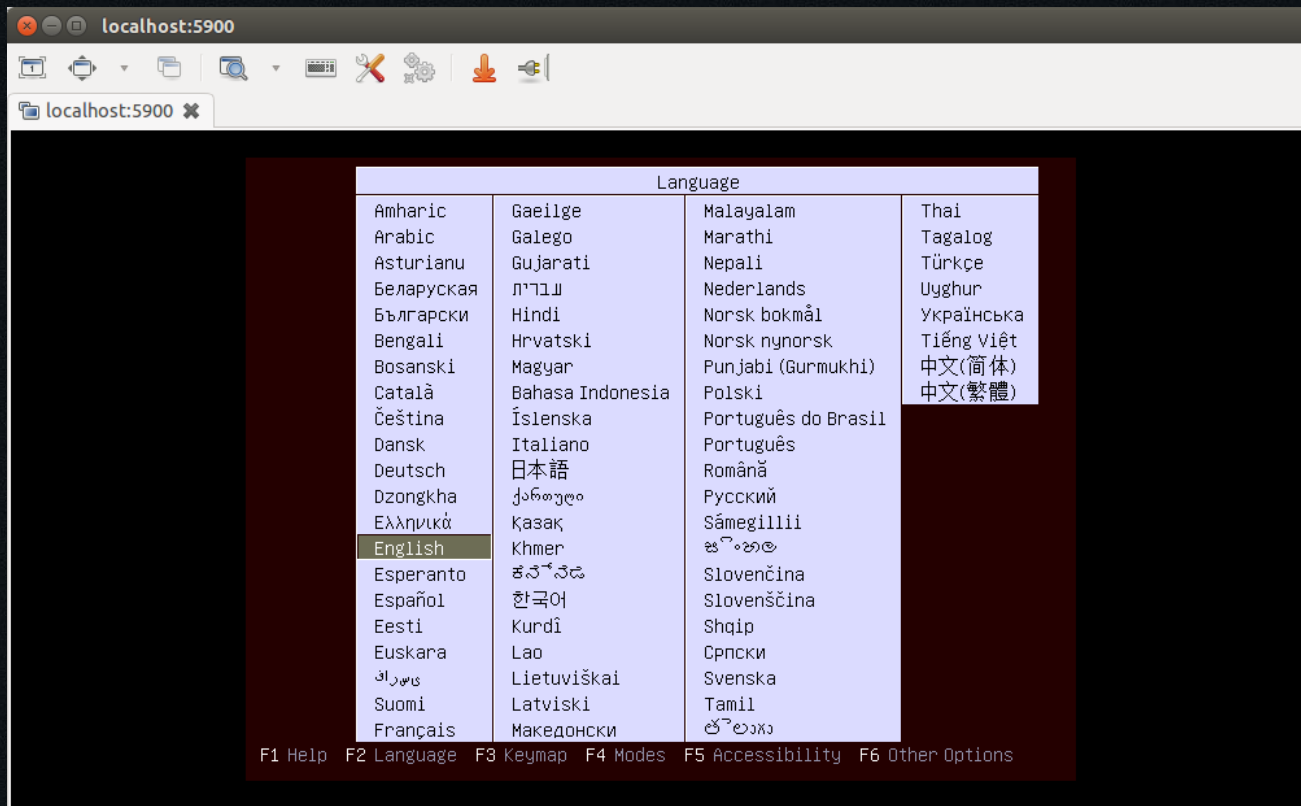
```
ssh -L 5900:136.206.16.1:5913 username@login.redbrick.dcu.ie
```

2. Open your VNC client, and connect to localhost display 0 (or port 5900).
3. Enter the following password when prompted: **Ym1esolk**
4. **Keep this password in a safe place. It will be valid while your VM is running, and it will not be displayed to you again after this point. To reset it, you'll have to power off and power on your virtual machine from this web interface.**

Click [here](#) to return to the VM management screen.

Redbrick VM Management System - Contact admins@redbrick.dcu.ie for help or bug reports - Source available at <http://hg.redbrick.dcu.ie/rbvm>.

CAN YOU SEE THIS?????

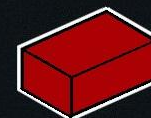


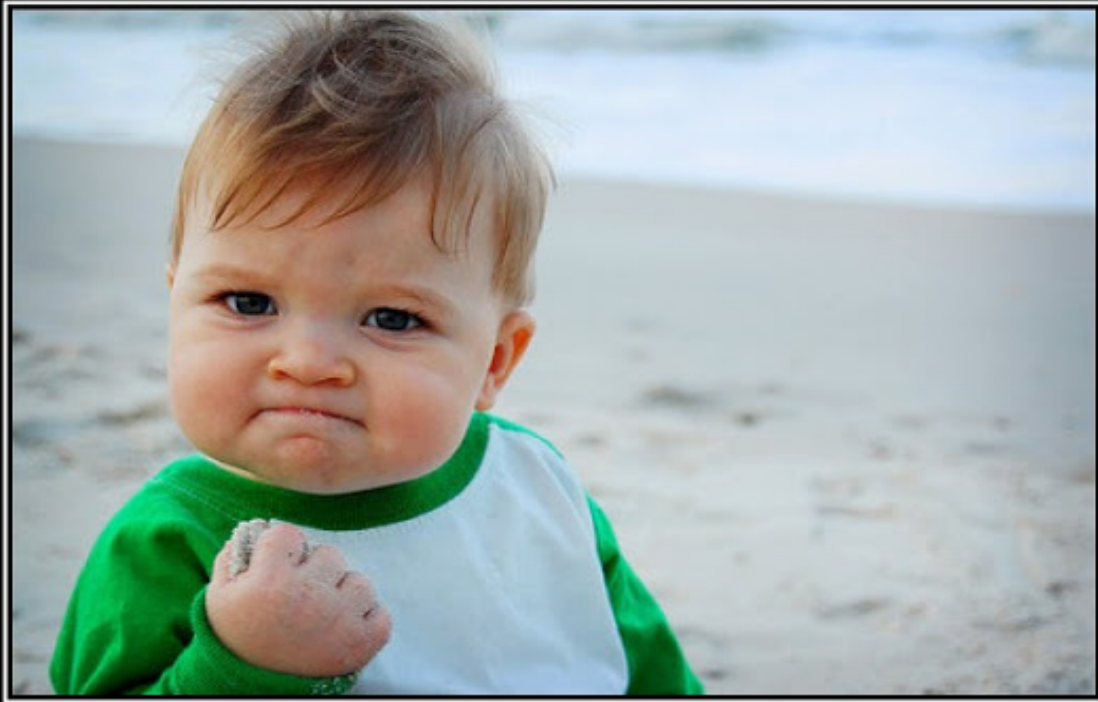
localhost:5900

localhost:5900

Language			
Amharic	Gaeilge	Malayalam	Thai
Arabic	Galego	Marathi	Tagalog
Asturiano	Gujarati	Nepali	Türkçe
Беларуская	ᠠᠨᠵᠢ	Nederlands	Uyghur
Български	Hindi	Norsk bokmål	Українська
Bengali	Hrvatski	Norsk nynorsk	Tiếng Việt
Bosanski	Magyar	Punjabi (Gurmukhi)	中文(简体)
Català	Bahasa Indonesia	Polski	中文(繁體)
Čeština	Íslenska	Português do Brasil	
Dansk	Italiano	Português	
Deutsch	日本語	Română	
Dzongkha	ಕನ್ನಡ	Русский	
Ελληνικά	Қазақ	Sámegiellii	
English	Khmer	ཨོཾ་ཨུ་ཨེ་	
Esperanto	ಕನ್ನಡ	Slovenčina	
Español	한국어	Slovenščina	
Eesti	Kurdî	Shqip	
Euskara	Lao	Српски	
عربى	Lietuviškai	Svenska	
Suomi	Latviski	Tamil	
Français	Македонски	தமிழ்	

F1 Help F2 Language F3 Keymap F4 Modes F5 Accessibility F6 Other Options

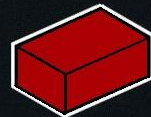




S U C C E S S

Because you too can own this face of pure accomplishment

DIY.DESPAIR.COM

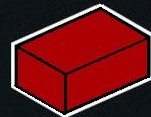


Redbrick

DCU's Networking Society

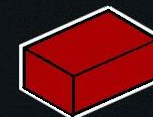
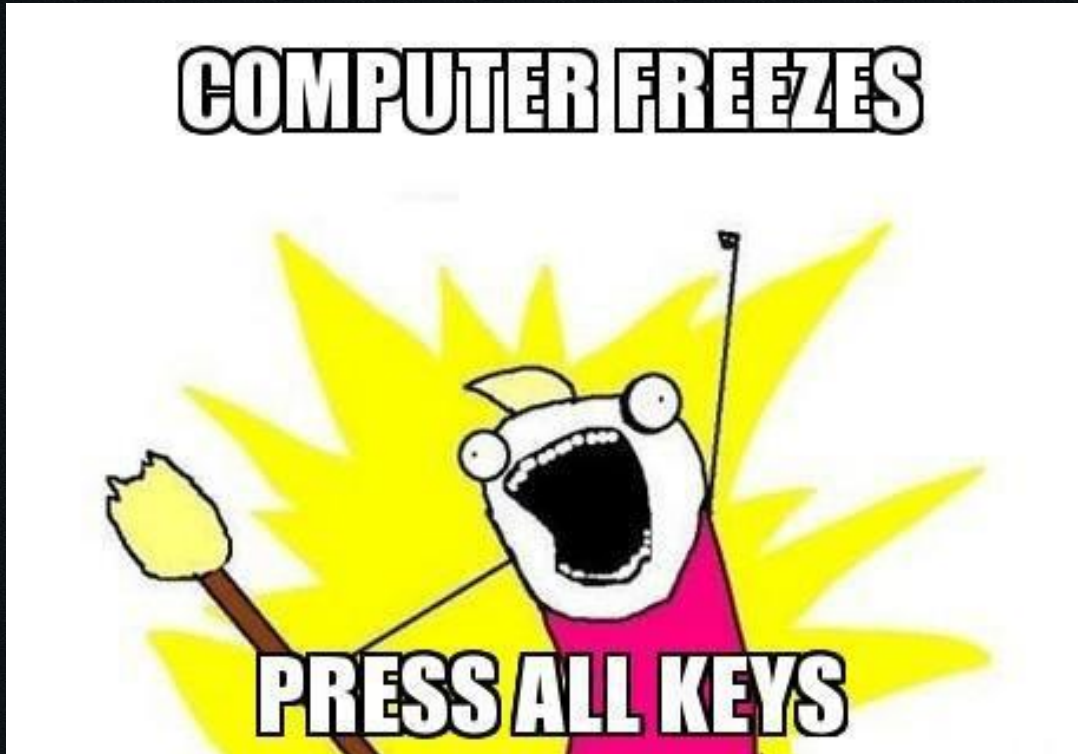
Half way there.

1. Language == English
2. Country == Ireland
3. Keyboard- Detection == Yes



Redbrick
DCU's Networking Society

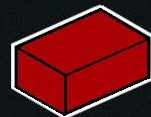
PRESS ALL THE KEYS!



Redbrick
DCU's Networking Society

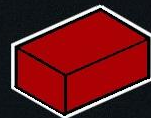
Configuring the Network

1. Manually Configure the DHCP
2. IP Address == The one your VM was assigned.
3. Netmask == 255.255.255.0
4. Gateway == default
5. Everything else is default
6. hostname, domain name, pretty much whatever you want to put in (not really important)



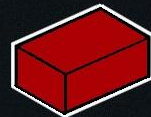
Now on to partitioning :)

1. Guided - Full Disk
2. Yes
3. Let it do its magic.



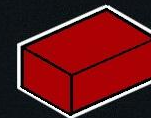
Redbrick
DCU's Networking Society

One
Eternity
Later



Redbrick
DCU's Networking Society

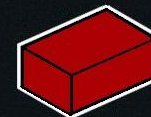
1. No Proxy info.
2. Just hit Continue
3. Install Security updates automatically
4. Choose software to install
5. Install GRUB :)



Redbrick
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Almost There...

1. Change Boot Device back to hard disk
2. Reset VM



Re-Access Over VNC

- Open a terminal
- Use the ssh command.
- Now on your local pc,
- Open VNC client and connect to localhost port 5900

Redbrick VM System

[Home](#) | [Logged in as testing](#) | [Preferences](#) | [Logout](#)

VM Power On

VM power on successful

To connect to your virtual machine's VNC server:

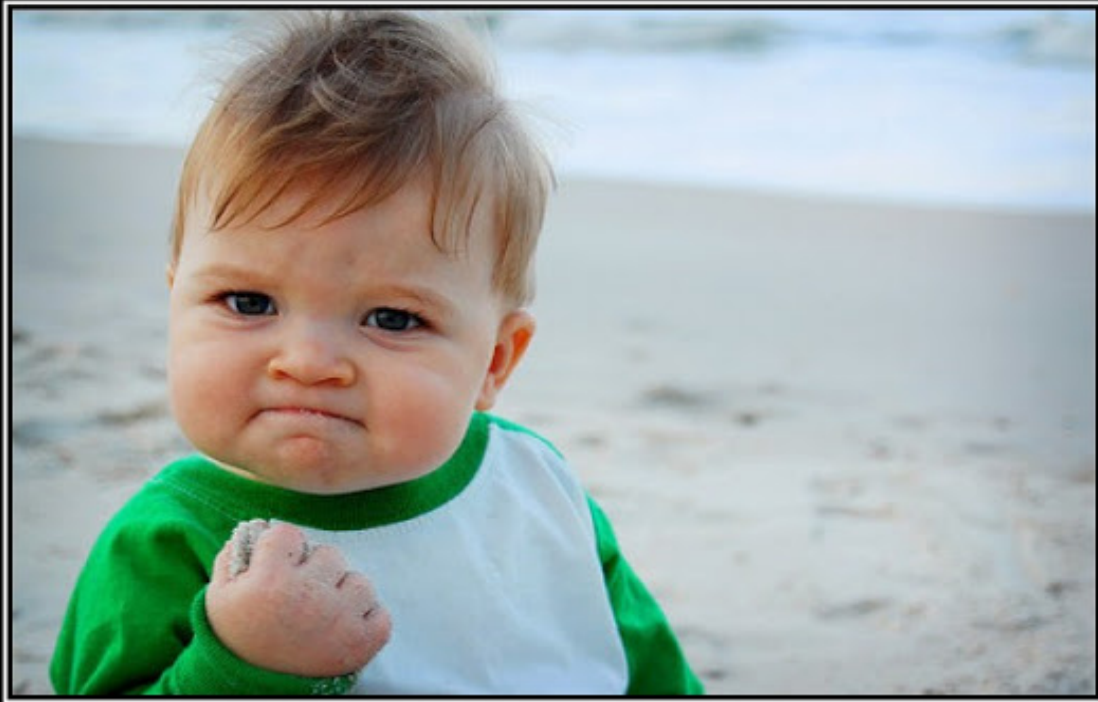
1. Connect to redbrick, SSH forwarding port 5900 to 136.206.16.1:5913:

```
ssh -L 5900:136.206.16.1:5913 username@login.redbrick.dcu.ie
```

2. Open your VNC client, and connect to localhost display 0 (or port 5900).
3. Enter the following password when prompted: **Ym1esolk**
4. **Keep this password in a safe place. It will be valid while your VM is running, and it will not be displayed to you again after this point. To reset it, you'll have to power off and power on your virtual machine from this web interface.**

Click [here](#) to return to the VM management screen.

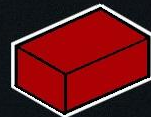
Redbrick VM Management System - Contact admins@redbrick.dcu.ie for help or bug reports - Source available at <http://hg.redbrick.dcu.ie/rbvm>.



S U C C E S S

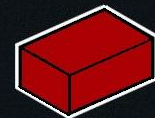
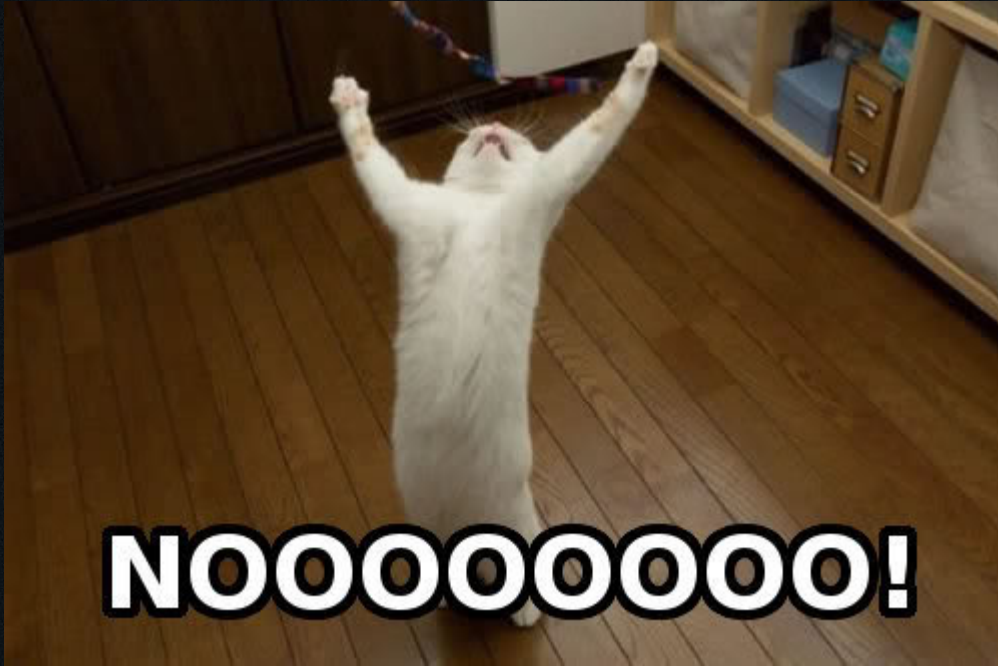
Because you too can own this face of pure accomplishment

DIY.DESPAIR.COM



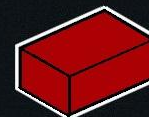
Redbrick
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NOoOoOoOoOo



Redbrick
DCU's Networking Society

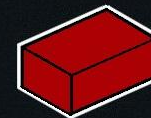
What's wrong??



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Lets fix it!!

1. `vi /etc/init.d/networking`
2. Change the gateway to "136.206.16.254"
- 3.



Redbrick
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What The Hell Is A Proxy??

So What Do I Do?

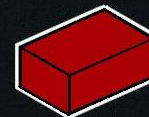
Edit the proxy information:

1. `cd /etc/apt/apt.conf.d`
2. `sudo vim proxy`
3. Insert the following line:

```
Acquire::http::Proxy "http://proxy.vmsrv.redbrick.dcu.ie:3128";
```

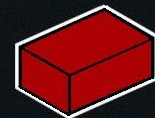
4. `cd ~`
5. `vim .bashrc`

```
export http_proxy="http://proxy.vmsrv.redbrick.dcu.ie:3128";  
export https_proxy="http://proxy.vmsrv.redbrick.dcu.ie:3128";  
export ftp_proxy="http://proxy.vmsrv.redbrick.dcu.ie:3128";
```
6. `source .bashrc`



So What Now?

- Make the vm secure
- Install some packages
- Make yourself at home



Redbrick
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